JS Series Owner's Handbook.

VECTRA

HOLDEN

Owner's Name .....
Address .....
Town .....
State.....Postcode .....

Model Name .....
Reg. No.....Eng. No. .....
Odometer Reading .....
Date of Purchase .....

(17 character I.S.O.V.I.N.) Vehicle Identification Number

Vehicle Identification Certificate

Selling Dealer's
Stamp & Signature .....

Holden Limited. A.C.N. 006 893 232 (hereinafter Holden).

Change of name, address or ownership

In the event of a Safety Recall, or for various reasons, Holden may need to contact you as the owner of this car. Also, if less than three years old, this car will qualify for Roadside Assistance, refer Chapter 9. If you have recently changed your address, or name, or purchased this car second-hand, please help us to help you by taking a few minutes to fill in and mail the form on the third page of this handbook.

Part No. 92075115
June 1998 (JS Vectra, print 2)

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We thank you for choosing Holden and want to assure you of our continuing interest in your motoring pleasure and satisfaction and compliment you on your choice.

This handbook applies to all the current Vectra models. Therefore, due to different models and options, you may find reference in this Handbook to some equipment not installed in your own car.

Please note that all information, illustrations and specifications in this Handbook are based on the latest production information available at the time of printing. Holden reserves the right to make changes at any time without notice and without incurring any obligation.

CHANGE OF ADDRESS OR OWNERSHIP

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Please tick the appropriate box:

☐ Original Owner ☐ Subsequent Owner

Title: (Mr, Mrs, Miss, Ms, etc.)

First name in full or initials

Surname or Name of Company/Institution/Government Department

Address

Street/box

City/Town

State Postcode

Car registration number

Holden Number (see page 8-4 of this book)

ISOVIN Number (see page 8-6 of this book)

Place in an envelope and mail to:

The Manager - Warranty Administration
Service Department
Holden Limited
Box 548D, G.P.O.
Melbourne
Victoria, 3001

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CHAPTER 1

Dash board

The following page illustrates the dash board, identifying the gauges, warning lights, controls and switches. Page reference numbers are listed next to each item.

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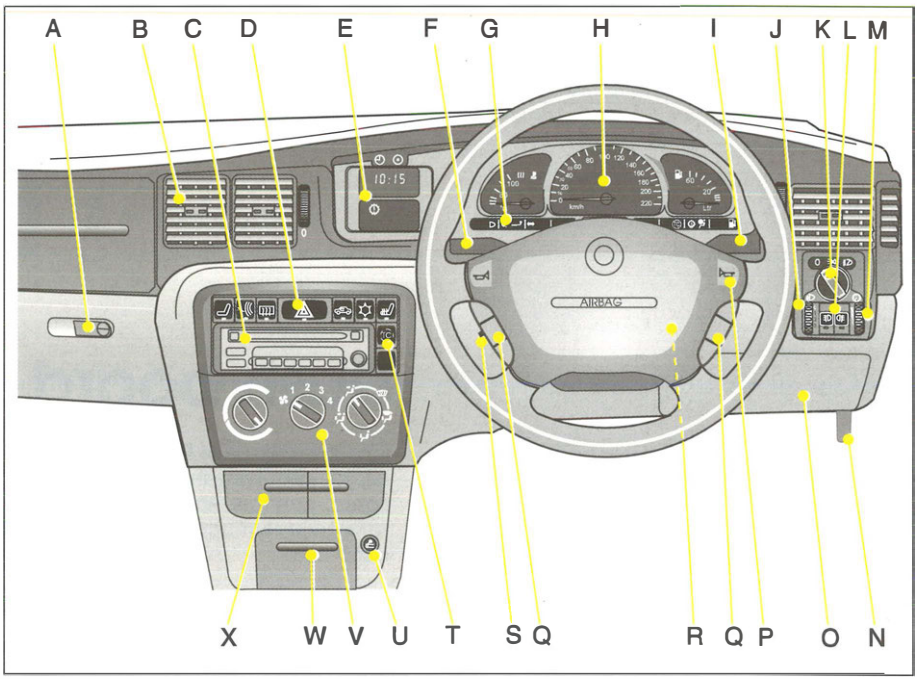
LAYOUT



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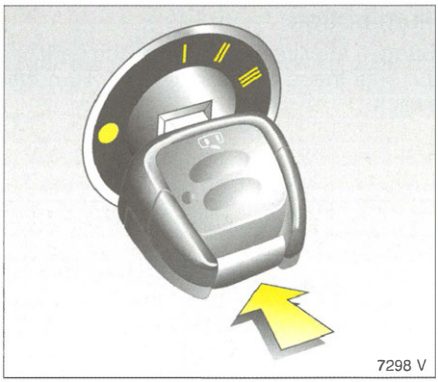
IGNITION AND HORN

Ignition



- ● *LOCK:* Ignition off. Steering locked, when key is removed.
- I *OFF:* Steering unlocked, ignition off.
- II *ON:* Ignition on.
- III *START:* Start the engine.

To release steering column lock:

To release the lock, move the steering wheel slightly and turn the key to position I.

To lock steering column:

Withdraw the key in position ●. Rotate steering wheel until the lock is heard to engage.

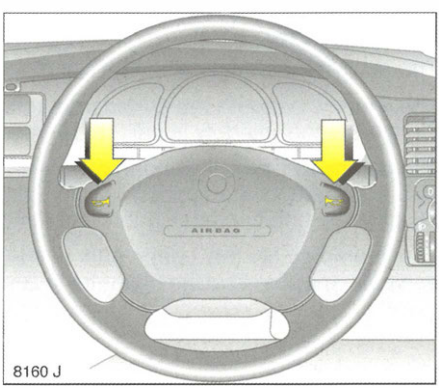
CAUTION: Do not turn the engine off while the car is moving. Power assisted equipment (such as brakes or steering) which are operated by the engine will be ineffective. Never remove the key while the car is moving, as this will lock the steering wheel.

An audible warning will remind you when:

- you are leaving the car and have not removed the ignition key.
- you are leaving the car and have left the headlights on.

Horn

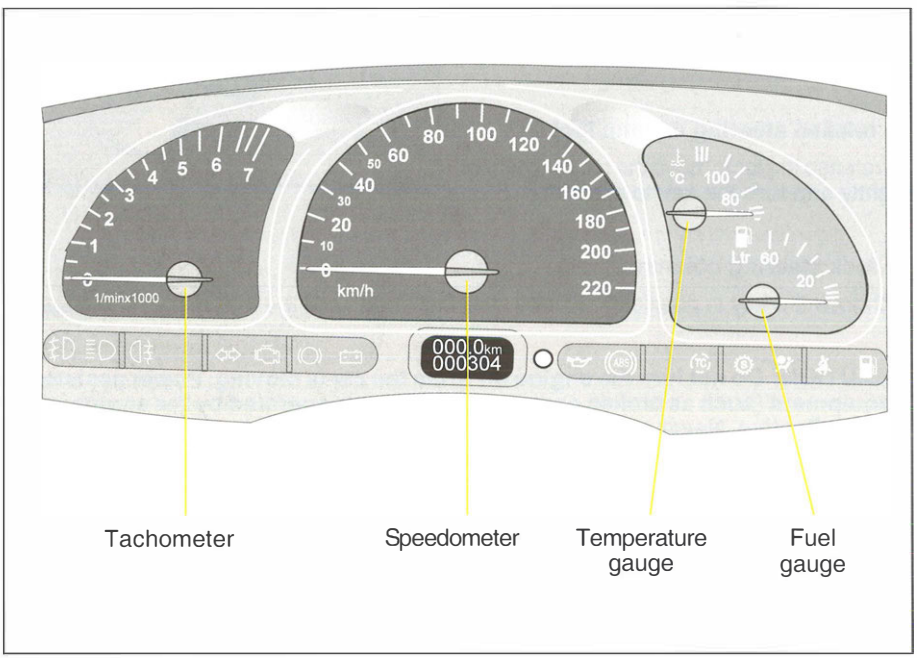
The horn is activated by pressing either of the symbols, on either side of the steering wheel.



GAUGES

Illumination

Gauges are illuminated when the park or head lights are switched on. On some models the brightness can be adjusted. Turn the thumb wheel (if fitted) beneath the headlight switch.



Speedometer

The speedometer indicates vehicle speed in kilometres per hour.

The window beneath the speedometer is for the odometer and tripmeter. The knob to the side of this window is called the "reset knob".

The odometer (in the lower part of the window) records kilometres travelled since the car was built. When the ignition is OFF the odometer can be displayed for approx. 15 seconds by briefly pressing the reset knob.

The tripmeter (in the upper part of the window) records kilometres travelled on a particular trip. To reset the tripmeter to zero, push the reset knob when the ignition is ON.

GAUGES

Tachometer

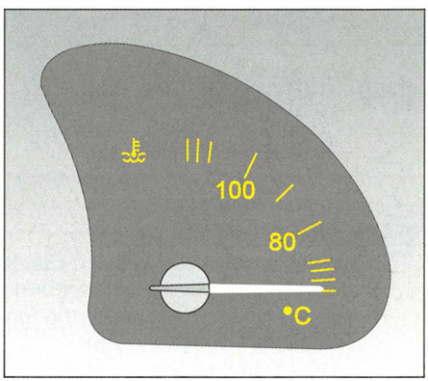
The tachometer indicates the engine speed in revolutions per minute (r.p.m.) times 1,000.

Sustained operation in the warning zone will cause serious engine damage.

Engine temperature gauge

The temperature gauge indicates the engine coolant temperature.

If the needle should move all the way to the RED ZONE for more than 30 seconds, you should stop the car as soon as it is safe to do so. Refer Chapter 6 for further information.



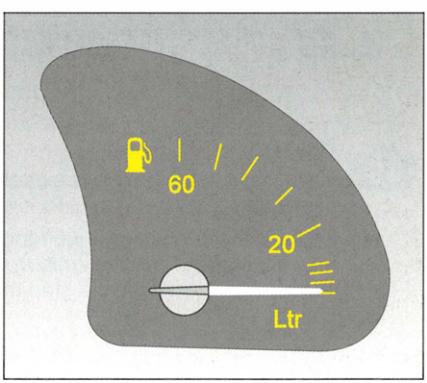
Fuel gauge

The fuel tank has a capacity of 60 litres.

Fill up before the pointer enters the red zone or the optional fuel symbol lights up. If the fuel light flashes the tank should be filled immediately.

Never let tank become empty, as this can damage the catalytic convertor in the exhaust.

Refer to chapter 5 for further information about refuelling.



WARNING LIGHTS - left side

Front fog lights (if fitted)

Lights up when the front fog lights are switched on.

High beam

Lights up when headlight high beams are in use or flashed.

Rear fog lights

Lights up when the rear fog lights are switched on.

Turn signal indicator

Flashes when turn signal lights are on. If the symbol flashes rapidly a turn signal light bulb has failed.

Check engine

Your car is fitted with an Electronic Engine Management System. The check engine symbol indicates when system service is required.

The symbol lights when the ignition is switched ON and goes out shortly after the engine starts to run.

When driving, the symbol may light up briefly and then go out again. This is of no significance. However, if it often or continuously lights up then service to the Engine Management System is required.

Although the car may still be drivable and does not require towing, see your Holden Dealer as soon as possible, as continued driving could affect fuel consumption, engine performance or may damage the catalytic converter.

However, if the symbol *flashes* and the engine cannot be started, turn the ignition OFF for at least 2 seconds before attempting to start the engine again.

Brakes

Lights up when ignition is switched on if park brake is applied and/or the brake or clutch fluid levels are too low.

To check that the bulb is working, ensure that the symbol lights up when the park brake is applied and the ignition is ON. If it lights during driving and the park brake is *not* applied you should stop the car as soon as possible and consult a Holden Dealer.

Battery

Lights up when ignition is switched on. Goes out when the engine is started and engine speed is increased above idle speed. If it lights up during driving then the battery is not being charged (engine cooling may also be affected). You should see a Holden Dealer as soon as possible.

WARNING LIGHTS - right side

Oil pressure

Lights up when ignition is switched on and goes out after the engine is started. It can light up intermittently when idling if engine is hot, but must go out when engine speed is increased. If illuminated during driving, stop the car as soon as possible and switch off the engine. Check the engine oil level. Do not run the engine with this light showing. If the oil level is normal, have the system checked at your nearest Holden Dealer.

ABS: Anti-lock Brake System (if fitted)

Lights up for a few seconds when the ignition is switched on. If it does not go out or if it comes on during driving, a fault has been detected in the ABS. The car's brake system remains operational but without ABS assistance, refer Chapter 4. You should consult your Holden Dealer as soon as possible.

Traction control (if fitted)

Lights up for a few seconds when the ignition is switched on.

Traction control can be switched on and off by pressing the traction control button, refer Chapter 4. The TC warning light is illuminated when the traction control is switched off. The TC warning light flashes when the system is controlling wheel spin.

Sports drive (automatic transmission only)

Lights up for a few seconds when the ignition is switched on.

Lights up when "Sports drive" is selected. Transmission then shifts at higher engine speeds, refer chapter 4.

Air bag and seat belt pre-tensioners

Lights up for a few seconds when the ignition is switched on. If it does not go out or if it comes on during driving, there is a defect in the system, and they might not work in the event of an accident. You should consult your Holden Dealer as soon as possible. Refer Chapter 3 for more information on seat belt pre-tensioners, or Chapter 6 for air bags.

Seat belt

The belt warning light is displayed for a short time when the ignition is first switched ON. The warning is designed to remind occupants to fasten their seat belts

Low Fuel (if fitted)

Lights up for a few seconds when the ignition is switched on.

Lights up when fuel gauge enters red zone and comes on earlier when driving around bends.

TRIPLE-INFORMATION DISPLAY (if fitted)

When the ignition is ON the display provides information about:

- time
- radio or date
- outside temperature

When the park or head lights are switched on the brightness of the display can be adjusted with the right-hand thumb wheel below the head light switch.

When the ignition is off, the time, date and outside temperature can be made to appear for about 15 seconds by briefly pressing one of the two buttons above the display.

Date and time

The date is displayed when the radio is switched off and the ignition is ON.

To adjust the date and time turn the ignition ON and switch off the radio. Press the buttons above the display as follows:

Press left button for approx. 2 seconds (day flashes)
Press right button until days are correct.

Press left button (month flashes)
Press right button until months are correct.

Press left button (year flashes)
Press right button until years are correct

Press left button (hour flashes)
Press right button until hours are correct

Press left button (minute flashes)
Press right button until minutes are correct

Press left button - clock starts at 0 seconds

If only the time is to be set, hold down the left button for at least 2 seconds, then repeatedly press the left button until hours/minutes flash. Adjust as above.

Outside temperature

A fall in temperature is indicated immediately and a rise in temperature after a time delay.

Caution: The road surface may already be icy even though the display indicates a few degrees above 0°C.

To warn the driver that the road surface may be icy, the snowflake symbol appears on the display and flashes for 20 seconds when the temperature drops to 3 °C or below.

TRIPLE-INFORMATION DISPLAY (if fitted), cont.

Fault display

If the display shows "- - ° C" a fault is indicated. The function in question is not working properly and you should contact a Holden Dealer.

Automatic transmission: fault

This symbol lights up when the ignition is switched ON. If this symbol lights up when driving a fault has been detected in the automatic transmission and you may have to manually change gears. You should see your Holden Dealer as soon as possible.

Interruption of power supply

If the battery has been reconnected or charged, or the battery voltage has dropped to a low level the triple-information display will be affected:

- Previously stored trip data will be wiped out.
- The date and time will need to be reset, refer "Adjusting the date and time", above.
- Any stored check control warnings will be erased.

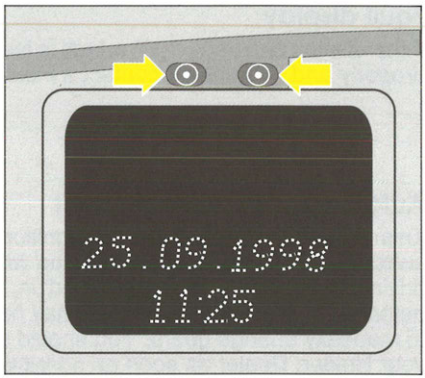
MULTI-INFORMATION DISPLAY (if fitted)

When the ignition is ON the display provides information about:

- time
- radio or date
- check control
- trip computer functions

When the park or head lights are switched on the brightness of the display can be adjusted with the right-hand thumb wheel below the head light switch.

When the ignition is off, the time, date and outside temperature can be made to appear for about 15 seconds by briefly pressing one of the two buttons above the display.



Date and time

The date is displayed when the radio is switched off and the ignition is ON.

To adjust the date and time turn the ignition ON and switch off the radio. Press the buttons above the display as follows:

Press left button for approx. 2 seconds (day flashes)
Press right button until days are correct.

Press left button (month flashes)
Press right button until months are correct.

Press left button (year flashes)
Press right button until years are correct

Press left button (hour flashes)
Press right button until hours are correct

Press left button (minute flashes)
Press right button until minutes are correct

Press left button - clock starts at 0 seconds

If only the time is to be set, hold down the left button for at least 2 seconds, then repeatedly press the left button until hours/minutes flash. Adjust as above.

Fault display

An "F" in the display indicates a fault. The function in question is not working properly and you should contact a Holden Dealer.

Interruption of power supply

If the battery has been reconnected or charged, or the battery voltage has dropped to a low level the multi-information display will be affected:

- Previously stored trip data will be wiped out.
- The date and time will need to be reset, refer "Adjusting the date and time", above.
- Any stored check control warnings will be erased.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Check control

The check control monitors:

- fluid levels
- front disc brake pad thickness
- the functioning of the automatic transmission (if fitted)
- important exterior light bulbs, including the wiring and fuses. A bulb is not checked until it is switched on.

When the ignition is switched ON the control functions are checked.

If all monitored functions are OK, display

BRAKE LIGHT
CHECK

goes out after the brake pedal has been pressed once.

"CHECK" and the faulty system shows on the display if a problem is found. If there are several fault warnings, they are displayed one after the other.

Check control fault warnings:

OIL LEVEL CHECK	(if engine oil level warning light fitted) Engine oil level too low, check immediately. Note that this warning is not fitted to all models. The engine oil level should be checked weekly, refer Chapter 7.
COOLANT LEVEL	Coolant level in expansion tank too low. Top up coolant, refer chapter 7. Consult a Holden Dealer.
AUTOMATIC GEARBOX	A fault has been found in the automatic transmission and it will no longer shift automatically. Change gear manually, refer chapter 4. Consult a Holden Dealer.
BRAKE PAD	Front disc brake pad worn down to minimum thickness. Consult a Holden Dealer to have the brake pads replaced.
BRAKE LIGHT FUSE	Fuse for brake light bulb defective, refer chapter 6. However, a new fuse should only be installed after the cause of the trouble has been fixed.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Check control fault warnings, continued

BRAKE LIGHT	Brake light bulb failure, refer chapter 7.
HEADLIGHT TAIL LIGHT	Head light or tail light bulb failure, refer chapter 7.
WASHER FLUID LEVEL	Fluid level in windscreen washer system too low, refer chapter 7.

If a fault is detected the display for the trip computer will be taken over by the display for the fault, until the fault is acknowledged by pressing the "**S**" or "**R**" button on the wiper lever. If several fault warnings are given, they must be acknowledged one after the other.

Once a fault warning has been acknowledged it no longer appears on the display. The display is then available for the trip computer. However, "CHECK" remains illuminated to remind you that one or more faults have been detected.

The following three fault warnings:

BRAKE LIGHT **BRAKE LIGHT FUSE** **HEADLIGHT TAIL LAMP**

reappear 15 minutes after they have been acknowledged.

After the ignition has been switched off and switched on again, the stored fault warnings appear on the display one after the other. Once the faults have been remedied, the fault warnings are automatically wiped clear.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Trip computer

The trip computer provides the following information about the following functions:

- **Inst**antaneous **Cons**umption of fuel
- Average fuel **Consumpt**ion
- **Trip cons**umption of fuel
- Average **speed**
- **Trip dist**ance
- **Range** (distance to empty)
- **Stop watch**
- **Outs**ide **temp**erature

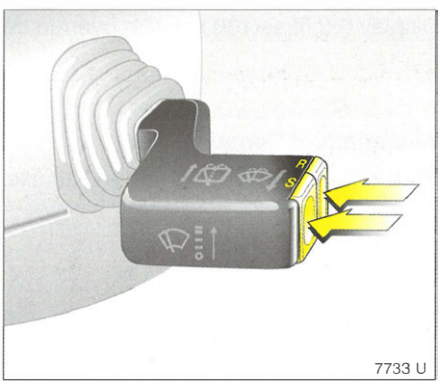
Some of the functions appear on the display in an abbreviated form (as highlighted above).

When the ignition is switched ON "outside temperature" will be displayed. However, if the check control system (see previous pages) has detected a fault then the trip computer display will be taken over by the check control system; bringing the fault to the driver's attention.

The trip computer is operated by two buttons on the wiper lever:

Button "S" - Select: Moves the display to the next function

Button "R" - Reset: Push the button for one second to reset the screen that is open at that time, - - - will be displayed. Hold the **R** button depressed for at least three seconds to reset all trip computer screens, * * * will be displayed.



The trip computer can be reset at any time, however the following examples are suggested as useful:

- At each tank refill. The trip computer will then give you results that are averaged out over each tank full of fuel.
- At the beginning of a trip. This might involve many tank refills and results will then be computed over the total journey.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Trip computer continued

When reset, the following windows will be cleared:

- average fuel consumption
- trip consumption of fuel
- average speed
- trip distance

Previously stored values are automatically cleared.

The following data cannot be erased:

- instantaneous consumption of fuel
- outside temperature.

Instantaneous consumption of fuel

The display changes depending on speed.

Display in litres/hour below 13 km/h.

Display in litres/100km above 13 km/h.

Display 0.0 litres/100 km with overrun cut-off, refer chapter 5.

Average fuel Consumption

Shows the average litres per 100km used since the trip computer was reset.

Absolute fuel consumption

Shows the total litres of fuel consumed since the trip computer was reset.

Average speed

Shows the average speed in km/h (while the ignition was ON) since the trip computer was reset.

Distance

Shows the number of kilometres travelled since trip computer was reset.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Trip computer continued

Range (distance to empty)

The range is calculated from the instantaneous fuel level in the tank and the average consumption for the last 20 to 30 km.

After filling up with petrol, the new range is either displayed by pressing button "**R**" or it appears automatically after the car has been driven a short distance. Display is shown in km.

Below 50 km: The display switches to "Range" without pressing button "**S**" if there is not sufficient petrol in the tank to travel for 50 km. Display flashes. This warning can be cancelled by selecting another function. However, if you then stop your journey the Range warning will be re-displayed when the ignition is again turned on.

Stop watch

Zero - start - stop - zero ... by pressing button "**R**".

Switching off the ignition causes the stop watch to be stopped. When the ignition is switched on again, the stop watch is restarted from the point at which it was stopped.

Outside temperature

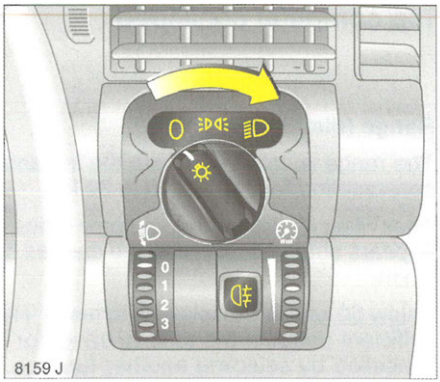
A fall in temperature is indicated immediately and a rise in temperature after a time delay.

Caution: The road surface may already be icy even though the display indicates a few degrees above 0°C.

To warn the driver that the road surface may be icy, the display changes automatically to flashing "Outside temperature" when the temperature drops to 3 °C or below. This warning is cancelled by selecting another function. When the temperature drops below -5 °C, the outside temperature is displayed but the display does not flash. Display is shown in °C.

LIGHT SWITCHES

Light switch



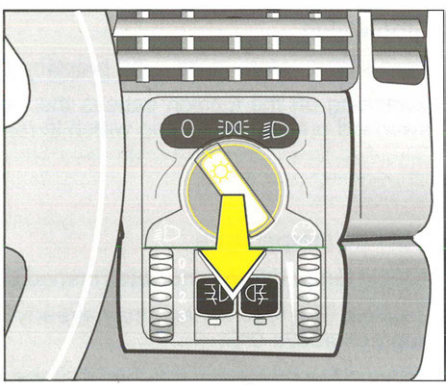
○ off

parking lights

headlights and parking lights

Courtesy light

Pull the light switch outwards to turn on the interior light.



Headlight levelling adjustment

The headlights can be adjusted to suit the current load in the car. Turn the toothed wheel below the headlight switch, marked 0, 1, 2, 3.

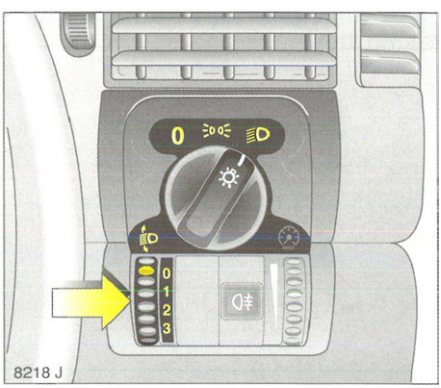
0 = driver only

1 = all seats occupied

2 = all seats occupied and load in the load compartment

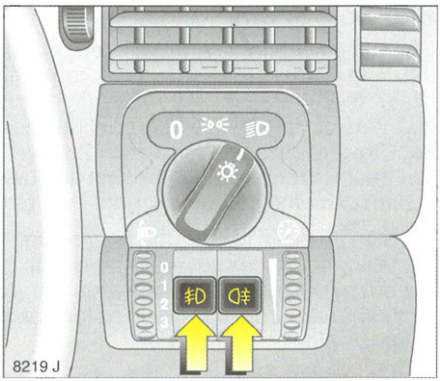
3 = driver, without other passengers but with load in the load compartment.

Correct adjustment of the headlights reduces dazzle for other drivers at night.



LIGHTS SWITCHES cont.

Fog lights



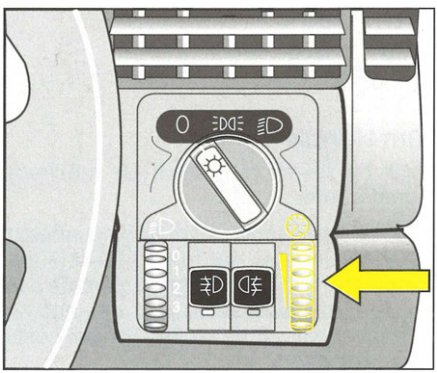
REAR: Press the right side button beneath the headlight switch to turn rear fog lights on and off. The fog light symbol in the instrument panel will glow when rear fog lights are working.

To avoid dazzling the driver behind you, rear fog lights should only be used when fog is very heavy.

FRONT (if fitted): Press the left side button to turn front fog lights on and off. The fog light symbol in the instrument panel will glow when front fog lights are working.

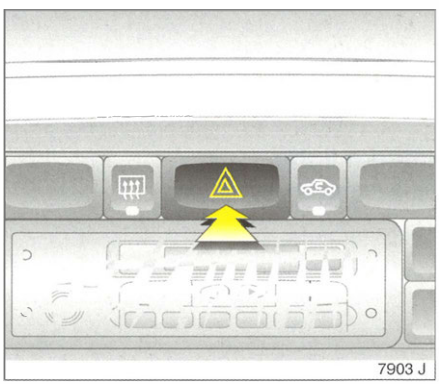
Check your State's Laws regarding use of fog lights when driving.

Instrument illumination



Gauges are illuminated when the park or headlights are switched on. On some models the brightness can be adjusted. Turn the right thumb wheel (if fitted) located beneath the headlight switch.

Hazard



Push the button to switch on or off.

Use the hazard warning flasher to warn other drivers if your car becomes a traffic hazard, day or night.

When the hazard warning system is on, the button's symbol will flash, in unison with the external turn signals.

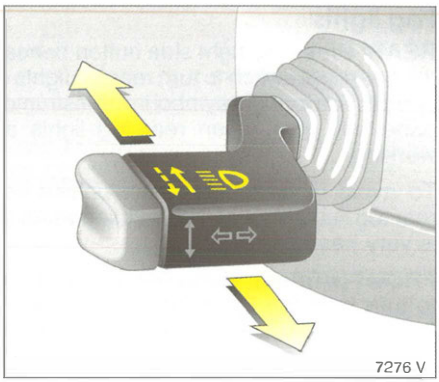
Use of the hazard warning flashers while the car is moving is illegal in some States.

High/low beam

When the headlights are switched on, push the lever away from you, until you feel a click, then release. The headlights will change from low to high beam. Pull the lever back towards the steering wheel to return to low beam. When the high beams are in use a symbol on the instrument panel will glow.

It is also possible to flash the high beams for signalling purposes (even if the headlights are off) by pulling the lever towards you. The lights will remain in high beam as long as the lever is held.

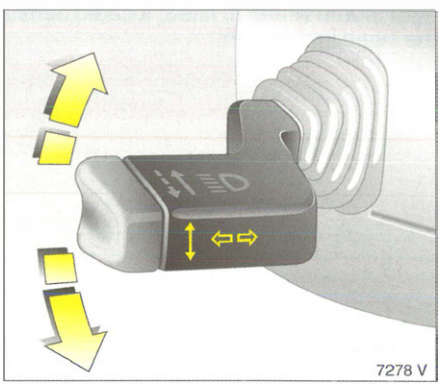
Leaving the headlights switched on without the engine running will eventually flatten the battery. A warning chime will remind you to switch off the headlights when leaving the car.



Turn signals

Push the lever up or down (as required) to signal a turn.

In some turns (such as changing lanes) the steering wheel is not turned far enough to cancel the turn signal. So, to indicate a lane change, move the lever part way and hold. The lever will return to the neutral position when released.



Interior lights

Refer chapter 3.

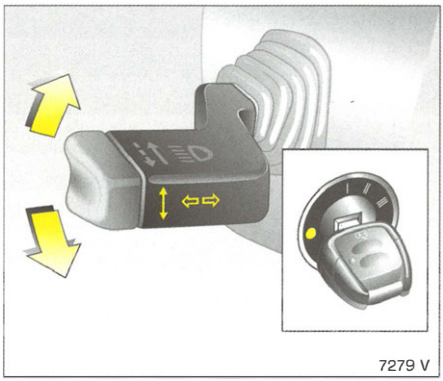
LIGHT SWITCHES cont.

Turn signal when parking

Remove the ignition key, turn the light switch off and move the turn signal up or down.

The corresponding *left* or *right* park lights (front and rear) will come on.

When the driver's door is opened a warning will sound until the door is closed.



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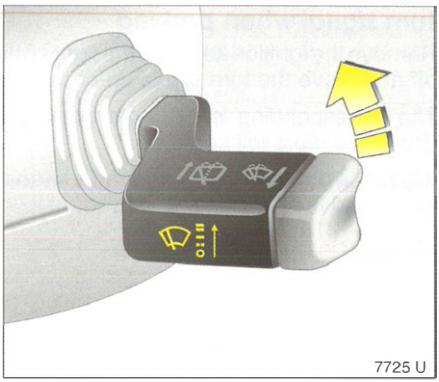
WIPERS & WASHERS

Windscreen wipers

Move the lever upwards.

=	fast
—	slow
- -	intermittent
O	off



Windscreen washer

Never operate with wipers on dry glass, as this will damage the rubber. To spray washer fluid onto the windscreen pull the lever toward you. At the same time the wipers are operated for several sweeps.

Tailgate washer (if fitted)

Push the lever away from you to the first 'stop' position to turn on the rear wiper. To turn on the rear washer, push the lever further and hold as long as required.

When the lever is in the 'stop' position, the rear wiper will operate at an intermittent speed.

RADIO, PHONES

Operating instructions

The radio can be heard until the key is removed from the ignition. Therefore, remember to remove the key when leaving the car for any length of time, or you may flatten the battery. If you must leave the key in the ignition, press the ON-VOL knob to switch off the radio.

The radio can also be heard when the key is removed from the ignition by pressing the ON-VOL knob. In this case, the radio will automatically switch off after one hour.

Refer to audio manual for operating instructions other than the operation of the steering wheel controls, which are shown below.

Important cassette care note
After repeated playing, residue from the tape surface and dust from surroundings builds up on the tape head and tape handling surfaces. This is first noticed as lack of treble and a muffled sound.

To assure good quality sound, reduce dropout and have trouble free operation, a good quality 'Wet type' cassette head cleaning tape should be used every month or two, depending on the amount of use.

Radio controls in the steering wheel (if fitted)

On the left hand side:

▶ Station search forward

◀ Station search backward

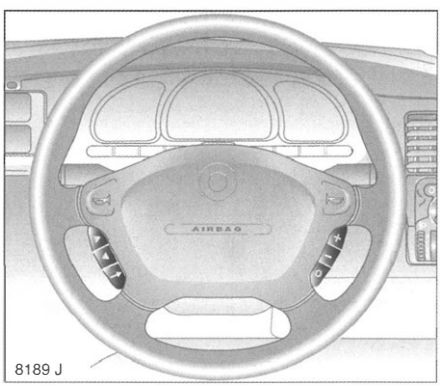
➜ Radio: to call up preset radio stations

On the right hand side:

\+ Increases volume

\– Decreases volume

o Changes between radio and cassette



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Mobile phones and CB radios

Mobile phones and CB radio equipment which use an integrated antenna, may temporarily affect the car's electronics when used inside the car, due to the interference created when transmitting.
Therefore, only mobile phones and CB equipment that use an antenna fitted to the outside of the car should be used.

Mobile phone connection

JS Vectras are fitted with a mobile phone connection taped under the left side of the glovebox in the passenger's foot well. On higher models the mobile phone preparation kit utilises the audio system of the car (refer to the radio manual).

For more information contact your Holden Dealer.

CIGARETTES

Cigarette lighter

The cigarette lighter works when the ignition is switched on.

Push the cigarette lighter inwards to heat. When the element is hot the lighter will automatically pop out, ready for use.

The lighter socket can be used to connect electrical accessories. The maximum power requirement of electrical accessories must not exceed 240 watts. Do not connect any current-delivering accessories, e.g. electrical charging devices or batteries.

Ashtrays

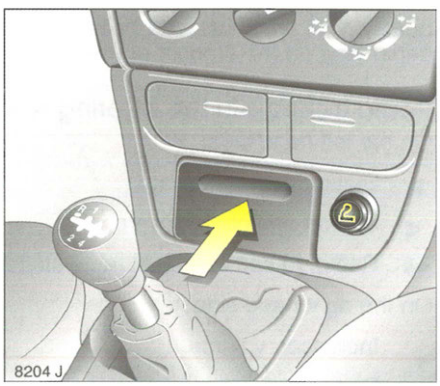
Ashtrays are only to be used for ash and not for combustible rubbish.

Front ashtray

To open, press the cover at the point indicated by the arrow in the illustration.

To empty the front ashtray grasp the inner container on both sides and lift upward to remove.

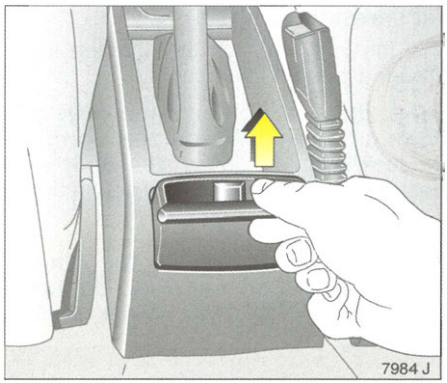
Empty and push back into place.



Rear ashtray (if fitted)

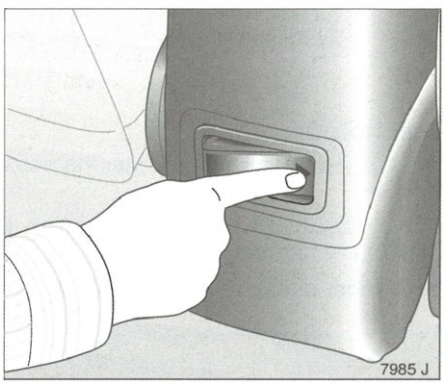
To open, swivel cover to the rear.

To empty, open the cover halfway. Pull the ashtray upwards by its cover, while tilting the ashtray slightly forwards.



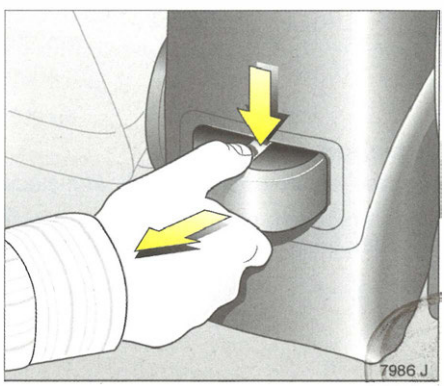
Rear ashtray (if fitted)

To open, press the point indicated in the illustration.



To empty, open the ashtray, press the tab and remove the tray.

To reinstall, press the tab, insert the tray and allow the tab to click into position.



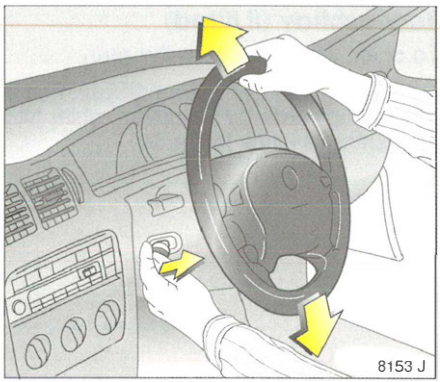
TILT STEERING, CUP HOLDER, GLOVEBOX

Tilt steering (if fitted)

Pull the lock lever on the left side for the steering column towards you.

Grasp the steering wheel and move up or down, as required. When in position, release the lock lever. Jiggle the steering wheel to ensure it has locked securely before driving.

CAUTION: As with all the other driver position controls, do not adjust the steering wheel while driving.

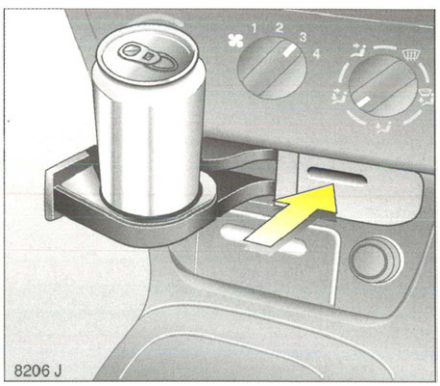


Cup holder

The cup holder is located under the heater controls.

Swivel the drinks holder into position by pressing on the depressions.

Remember drinks when you drive off!



Glovebox

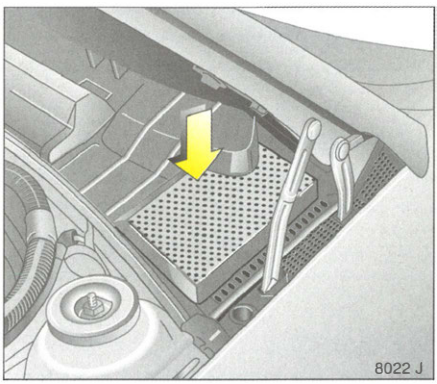
Turn the key clockwise to lock, anti-clockwise to unlock.

When unlocked, pull the lever at the side of the glovebox lock outwards to open the glovebox lid. Push the lid shut to close the glovebox.

VENTILATION

The car features a flow through ventilation system for your comfort. Under mild conditions, it shouldn't be necessary to open the windows.

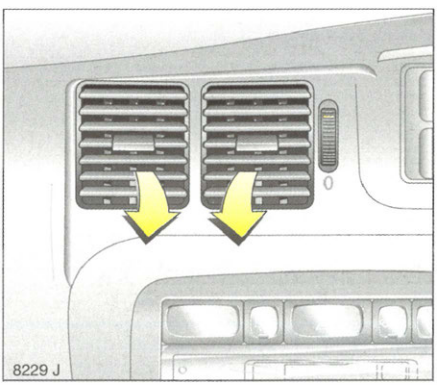
Outside air is drawn into the car through the opening at the base of the windscreen. Do not allow this opening to become clogged with debris, such as leaves or snow.



The demist and foot vents are not adjustable as they direct air to the windscreen, windows or feet in the best possible way.

However, the vents which direct air to the face are adjustable. They can be swivelled and tilted as required. They can also be completely shut off by turning the wheel next to the vent to **O** position.

A setting like that shown in the illustration, but with the air flow directed slightly upwards, directs a small stream of air to the rear passengers, without impairing the comfort of the driver and front passenger.

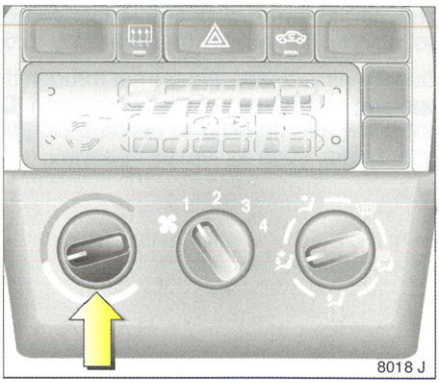


VENTILATION AND HEATING

Temperature dial

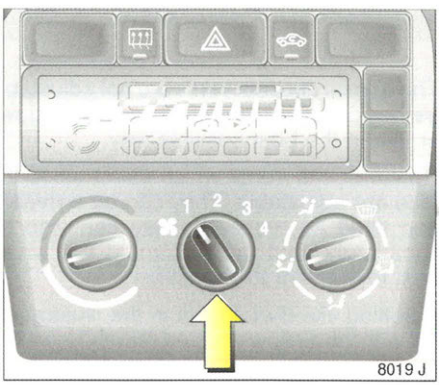
Anticlockwise = cool

Clockwise = warm



Fan dial

OFF plus four fan speeds are provided, '4' being the fastest speed.



Vent dial

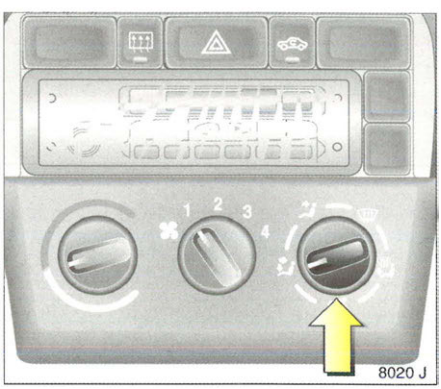
air from demist vents

air from demist and foot vents

air from foot vents

air from face and foot vents.

air from face level vents



The dial may be set to any intermediate position, between the symbols.

Remember, when selecting "face" level vent positions, that the vents must be open to allow air flow.

VENTILATION AND HEATING

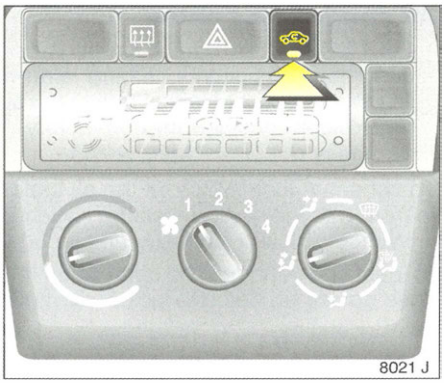
Air re-circulate button

Push the button to switch between re-circulate and outside air. The light in the switch glows when re-circulate is selected.

When following another car on dusty roads, or to prevent exhaust fumes or odours entering your car, use the re-circulation position. However, when driving on unsealed roads but where the dust is not airborne, select the outside position. All windows must be closed and the fan preferably on a high speed so that positive air pressure in the car will prevent dust being sucked in.

Re-circulate reuses interior air and is therefore not recommended for long periods of time.

If occupants are smoking, it is recommended that the re-circulate position NOT be used, as the tobacco smoke adheres to the air ducts and will produce stale smelling air.

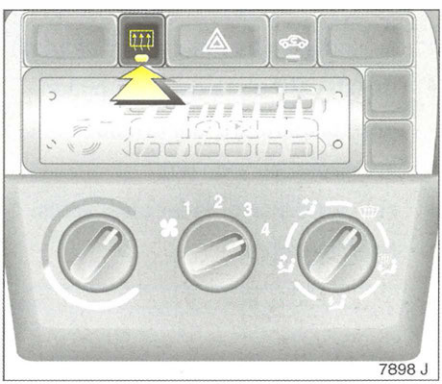


Demisting (rear window & mirrors)

Push the button to switch the demisting on and off. The light in the switch glows when demisting is ON.

Demisting is provided for the rear window as well as (on some models) the outside mirrors.

Demisting will automatically switch off after approximately 15 minutes.

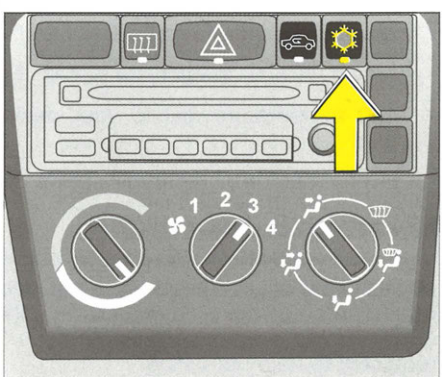


Air conditioning (if fitted)

Push the button to switch the air conditioning on and off. The light in the switch glows when air conditioning is ON. The fan automatically runs at low speed, which can be increased if required.

Air conditioning removes heat and moisture from the air. If the temperature dial is moved away from extreme cold, the air will then be reheated before entering the cabin.

Air conditioning will automatically switch off when outside air temperature is below +4 decrees C.



HEATING/COOLING NOTES

Air conditioning notes

CAUTION: The Vectra model is not designed to accept non-factory fitted air conditioning systems. Fitting after-market air conditioning systems is *not* recommended by Holden and may void your New Vehicle Warranty, to the extent that Holden considers the non-factory fitted air conditioning affects the specifications or quality of your Holden vehicle.

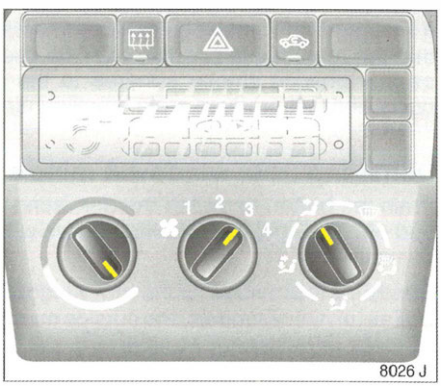
To conserve fuel, switch off the air conditioning in cold weather. However, once every month (with the engine running) switch the air conditioner on for 5 to 10 minutes, even in Winter. This will lubricate the air conditioning system.

At least one vent must be open when the air conditioning is ON, so that the evaporator does not ice up due to a lack of air movement.

Ventilation without air conditioning

To conserve fuel when air conditioning is not required or is not fitted.

- air conditioning switch OFF (if fitted)
- switch OFF air re-circulate button
- turn temperature dial to cold
- fan speed as required
- set vents dial to "face" level vents
- open all vents



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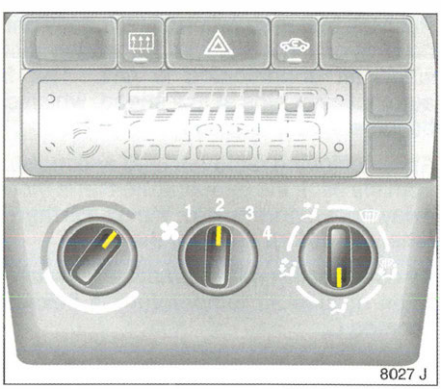
Heating

- air conditioning switch OFF (if fitted)
- switch OFF air re-circulate button
- turn temperature dial to your desired heat
- fan as required, but not full speed
- vents dial to "foot" level vents

Note that heat will not be available until the engine warms up. Therefore, keep vents closed until the engine has warmed up, then direct vents towards side windows (if required) to help defrosting.



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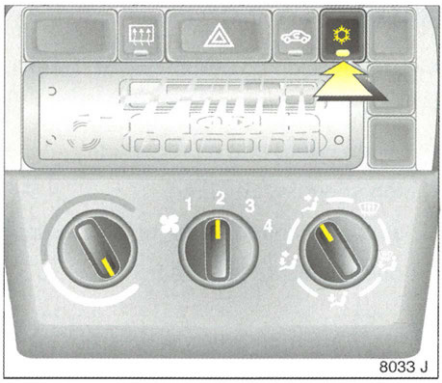
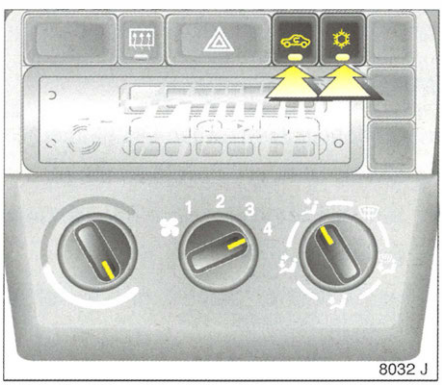
HEATING/COOLING NOTES

Normal cooling



- air conditioning switch ON (if fitted)
- switch OFF air re-circulate button
- turn temperature dial to cold
- fan speed as required
- set vents dial to "face" level vents
- open all vents

Maximum cooling (if air conditioning fitted) in hot weather or when the car has been left in the sun



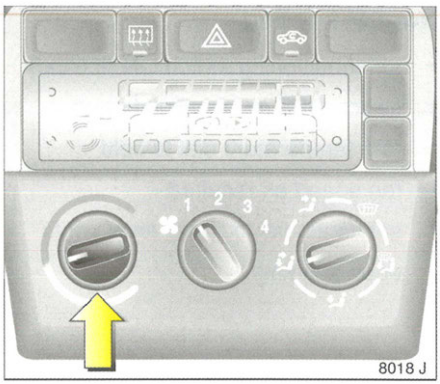
Open the windows briefly so that warm air can escape quickly.

- air conditioning switch ON
- switch ON air re-circulate button
- turn temperature dial to cold
- fan to highest speed
- set vents dial to "face" level vents
- open all vents

Close all windows after the initial hot air has escaped, as the air conditioner works most effectively when all windows are closed.

DO NOT leave re-circulation on for too long, as no outside air is drawn into the car; cabin air is re-circulated and therefore may become stale.

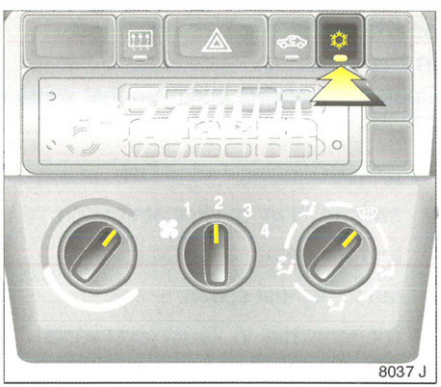
Bi-level



- air conditioning switch ON (if fitted)
- switch OFF air re-circulate button
- temperature dial as required
- fan speed as required
- set vents dial to "face" or "face & foot"
- open vents as required

When the temperature dial is not set to extreme hot or extreme cold the bi-level position provides warmer air to the face and cooler air to the feet.

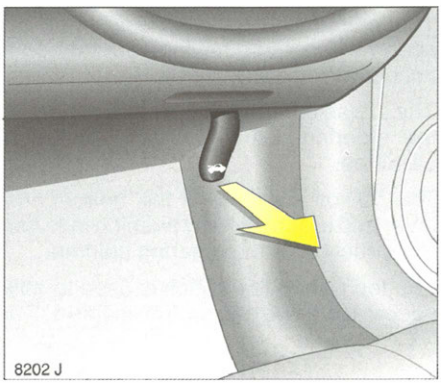
Windscreen demisting



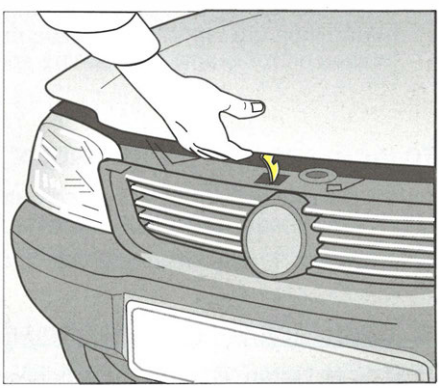
- air conditioning switch ON (if fitted)
- switch OFF air re-circulate button
- temperature dial to your desired heat
- fan as required
- vents dial to "demist" or "demist and foot" level vents
- Close all face vents.

BONNET

From inside the car, pull the lever towards you. This allows the bonnet to release but is prevented from opening by the safety catch.



To open completely, lift bonnet slightly, reach in under the bonnet and move the lever upwards (while lifting the bonnet).



To close, lower the bonnet gradually to be finally dropped by its own weight.

Always check that the bonnet is properly closed and that the release lever inside the car has returned to its original position.

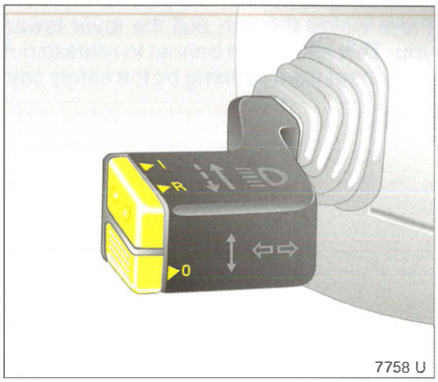
CRUISE CONTROL (if fitted)

The cruise control maintains your car's speed without you having your foot on the accelerator pedal.

The cruise control lever is on the left side of the steering column. The lever has two switches.

The "**O**" off switch is at the *bottom* of the lever and is activated by pushing in towards the direction of the steering column.

The top part of the switch is used to adjust speed. It is a two part switch, marked "**I**" and "**R**".



SWITCHING ON:

- Press the accelerator pedal until travelling at your desired speed, (above 30 km/h) and then tap the "**I**" button. You may now release the accelerator pedal, as the cruise control is now maintaining speed.

TO INCREASE SPEED WITH CRUISE CONTROL ON:

Hold down button "**I**" or tap repeatedly: the speed is increased continuously or in steps of 2 km/h without using the accelerator pedal.

When button "**I**" is released the selected speed is stored and maintained.

TO DECREASE SPEED WITH CRUISE CONTROL ON:

Hold down button "**R**" or tap repeatedly: speed is reduced continuously or in steps of 2 km/h.

When button "**R**" is released the selected speed is stored and maintained.

SWITCHING OFF:

Tap button "**O**": the cruise control is switched off. The car slowly decelerates. To continue driving depress the accelerator pedal in the usual way.

The cruise control is also switched off when:

- car speed drops below 30 km/h
- the brake pedal is depressed
- the clutch pedal is depressed
- the selector lever of cars with automatic transmissions is moved to "N"

CRUISE CONTROL (if fitted)

RESUMING THE STORED SPEED:

Tap button "**R**" at a speed above 30 km/h: the speed selected before the cruise control was switched off is resumed.

The stored speed is erased when the ignition is switched off.

WARNING:

Do not use the cruise control when road or driving conditions could require varying speeds. A constant speed may not be practical in heavy or varying traffic, or on winding, slippery or rough roads.

Remember that when the cruise control is maintaining your speed taking your foot off the accelerator pedal will not reduce speed. To quickly deactivate the cruise control you should press the brake or clutch pedal, or push the "O" button.

If your car is fitted with an automatic transmission it is advisable to switch on the cruise control only when the transmission T-bar selector is in "D".

The cruise control will not apply the car's brakes. Therefore the car may gain speed when going down steep hills.

When climbing steep hills (particularly when towing) it is possible for the car to lose speed. You may need to switch off the cruise control and instead use the accelerator pedal.

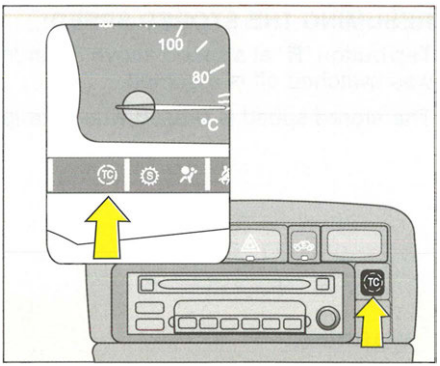
TRACTION CONTROL (if fitted)

Traction control stops wheels spinning.

In certain circumstances slight slippage of the driving wheels may be required, such as when driving with snow chains.

Pressing the TC button turns the system OFF and ON. When switched off, the TC warning light on the instrument panel lights up to remind the driver that the system is OFF.

Refer chapter 4 for explanation of the traction control system.



Notes

CHAPTER 2

Locks

Page

2-2 Keys
2-3 Remote control keys
2-3 Free-turning door locks
2-4 Door locks
2-5 Dead locks
2-6 Hatch/boot/tailgate lock
2-7 Fuel filler lock
2-7 Glovebox lock
2-7 Child safety rear door lock

KEYS

Keys

Before placing the key on your key ring, remove the plastic tab (or label) and hide in a safe place away from your car. Then, if your key is lost, a replacement can be ordered through a Holden Dealer by quoting the key code number and providing proof of ownership.

Also note the key code on alloy wheels if they are fitted with locks.

Your car also have a security card which lists various security numbers for your car. As with key numbers, please keep the security card in a safe place, away from your car.

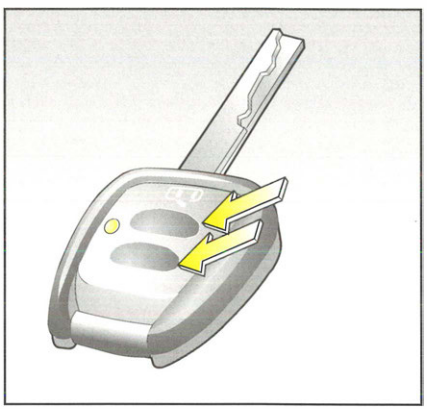
Keys

Treat the key with care; it should be protected against moisture and should not be operated unnecessarily.

Press the front button to:
- unlock the doors
- switch off dead-locking
- switch off the anti-theft alarm system

Press the rear button ONCE to:
- lock the doors

Press the rear button TWICE to:
- deadlock the doors



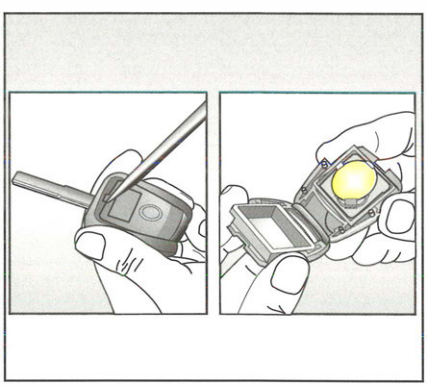
Replacing the key battery

The key is powered by a battery. A weakening battery is indicated by a progressive "loss of range", which means you must be closer to the car when pressing the buttons. Originally the remote control should have a range of 3 metres. *Tinting the car's windows will reduce the range of the key if the tinting material has a metallic film.*

To replace the battery, open the battery compartment with a screwdriver, as shown.

Replace the battery, ensuring that it is inserted correctly. Replace the battery cover, ensuring that it clicks into position.

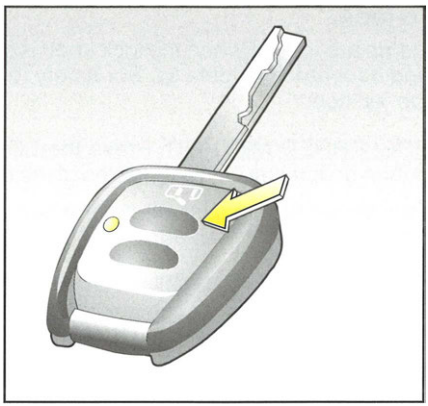
The battery change must be performed within 3 minutes, otherwise the remote control will have to reprogrammed.



Reprogramming the key

If the remote malfunctions, reprogram the key:

- Switch on the ignition. The system will then remain in programming mode for 30 seconds.
- *While inside the car*, briefly press one of the buttons on the key.
- The central locking system locks and unlocks to show that remote control has been reprogrammed.



Free turning door locks

The door lock cylinder is designed to free turn if it is forcefully rotated without the correct key or if the correct key is not fully inserted. To reset, turn the lock with the correct key until its slot is vertical, remove the key and then re-insert it. If the lock still free turns, turn the key through 180 degrees and repeat the operation.

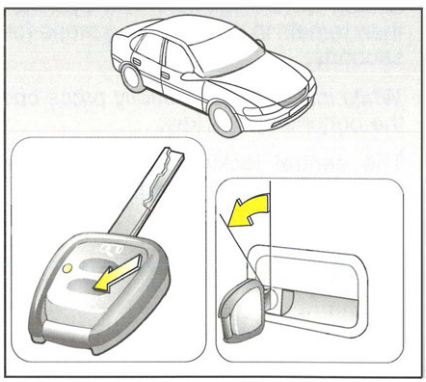
Note that this feature is provided as a theft deterrent - to prevent the lock being forced open. The force required to make the key "free turn" reduces each time. As the force gets easier with each "free turn" please do not attempt to demonstrate or test this feature, and always remember to fully insert the key when locking and unlocking the doors.

If you have problems contact your Holden Dealer. Remember that your car is covered for the first 3 years by Roadside Assist, refer Chapter 9.

DOOR LOCKS

To lock

Doors are locked when the lock knob is down. Locking includes: all doors, fuel filler lock and boot/hatch/tailgate lid. For safety reasons, the car cannot be locked if the key is in the ignition.



PREFERRED METHOD: Press the LOCK button on the key within 3 metres of the car.

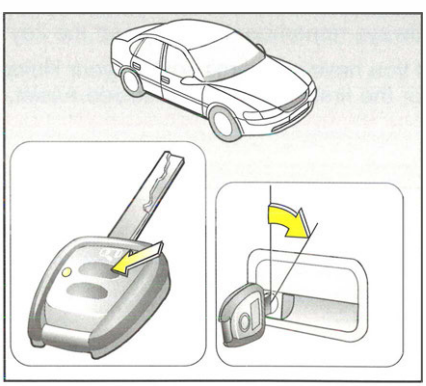
The car's turn signals will flash when the signal has been received.

ALTERNATIVE METHOD: You may turn the key in the driver's door lock towards the rear of the car, then turn it back to the vertical position and remove.

IF STAYING IN THE CAR: Press the door lock knobs down. Note that pushing down the driver's door lock locks all doors at the same time.

To unlock

Doors are unlocked when the lock knob is up. Unlocking includes: all doors, fuel filler lock and boot/hatch/tailgate lid.



PREFERRED METHOD: Press the UNLOCK button on the key within 3 metres of the car.

The car's turn signals will flash when the signal has been received.

ALTERNATIVE METHOD: You may turn the key in the driver's door lock towards the front of the car, then turn it back to the vertical position and remove.

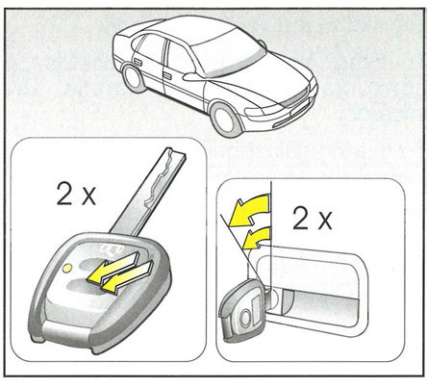
UNLOCKING FROM INSIDE THE CAR: Pull up the door lock knobs. Note that pulling up the driver's door lock knob unlocks all doors at the same time.

DEADLOCK

For further protection when leaving the car, you can 'deadlock' the doors. Deadlocking electronically jams all the electric locks so that no door can be opened, even if entry is gained by breaking glass.

CAUTION: Do not use deadlock if there are people in the car. The doors cannot be unlocked from inside.

To set deadlock

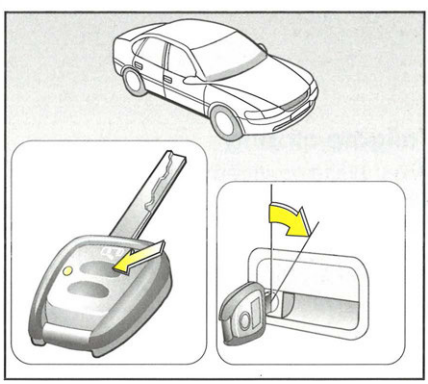


METHOD 1: Press the LOCK button on the key *twice* in succession. That is, press the LOCK button once to lock the cars, then press it again (within 10 seconds) to set the deadlock.

or

METHOD 2: Insert the key in the driver's door lock and turn the key TWICE to position shown in the illustration. That is, once to lock the doors, then a second time to set the deadlock.

To unset deadlock



METHOD 1: Press UNLOCK on the key. This will undeadlock the doors. Therefore, undeadlocking happens naturally, when unlocking the doors.

or

METHOD 2: Alternatively, you can turn the key anti-clockwise (once only).

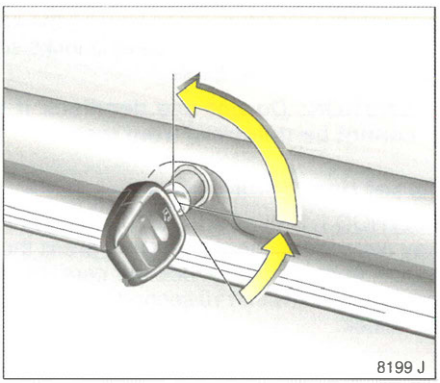
Undeadlocking is not possible in any other way, so keep a spare key handy in a safe place.

Notes

- The LOCK and UNLOCK buttons may not work near high radio activity, for-instance under TV towers. If this happens, the doors can be locked and unlocked by turning the key in the door lock.
- Locked doors are unlocked automatically in the event of an accident (to allow assistance from outside), provided that the ignition is not switched off.
- If the system is overloaded as a result of repeated operation at short intervals, the power supply is cut off for approximately 30 seconds.
- If the driver's door is not closed properly, the locking system will unlock again immediately after locking.
- Electric windows (if fitted) can be closed from outside the car by holding the key in the lock position until they are closed.

REAR LOCK

Hatchback/boot/tailgate lid



Provided that the key slot is horizontal, the rear lid will lock/unlock when the doors are locked/unlocked.

To keep rear lid permanently locked (regardless of door lock position) turn the key slot to the vertical position.

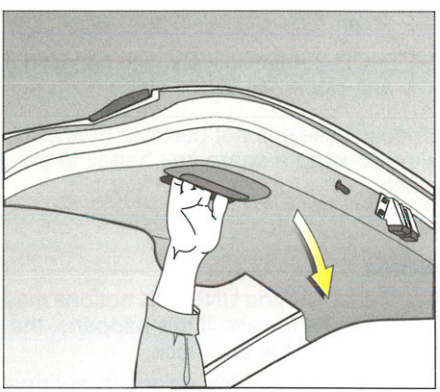
To unlock, turn the key fully clockwise, past horizontal towards the handle. Press inwards.

To guard against being locked out, the key cannot be removed in this position.

To return the operation to locking/unlocking in synchronisation with the doors, after closing the rear lid, turn the key back to the horizontal position.

Tailgate closing

A handle is provided to assist in closing the tailgate.



LOCKS

Fuel filler release

The fuel filler flap is unlocked whenever the doors are unlocked. Refer to Chapter 5 when refuelling.

Glovebox lock

Turn the key clockwise to lock, anti-clockwise to unlock.

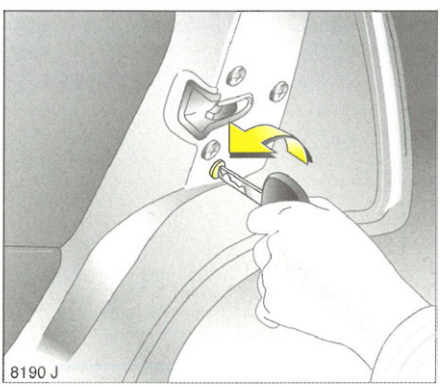
When unlocked, pull the lever at the side of the glovebox lock outwards to open the glovebox lid. Push the lid shut to close the glovebox.

Rear "child proof" door locks

Child proof locking helps prevent rear doors from being accidentally opened by small children inside the car.

Using the key, turn the knob on rear door lock clockwise from the vertical position: the door cannot be opened from inside.

It can only be opened by pulling up the inside lock button and then raising the outside door handle.



CAUTION: For safety, check that the child proof lock is operating correctly (after setting) by trying to open the door from inside the car.

CHAPTER 3

Know your car

Page

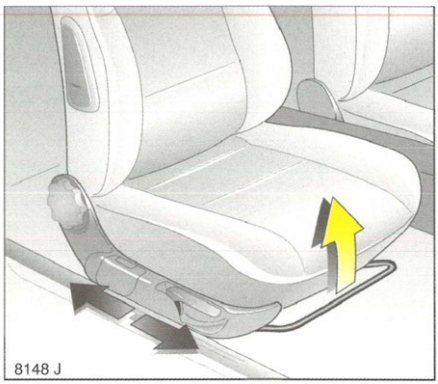
3-2 Front seat adjustment
3-4 Head restraints
3-5 Seats - rear, fold down
3-7 Seat belts
3-10 Child restraints
3-14 Mirrors
3-15 Windows
3-17 Sunroof
3-18 Interior lights
3-19 Park brake
3-20 Wagon compartment cover

FRONT SEAT ADJUSTMENT

Forward/rearward

Lift the lever at the front of the seat upwards then slide the seat forward or backward. After releasing the lever, try to move the seat back and forth to check that the catch has locked in position.

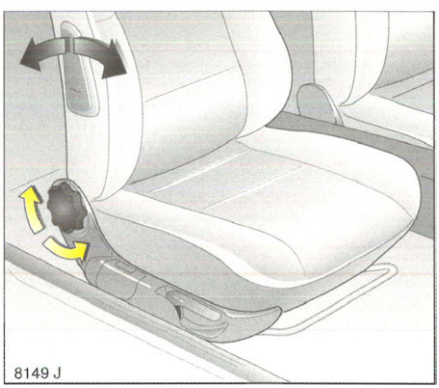
Never adjust the driver's seat whilst driving. The seat could move suddenly and cause the driver to lose control.



Recline/incline

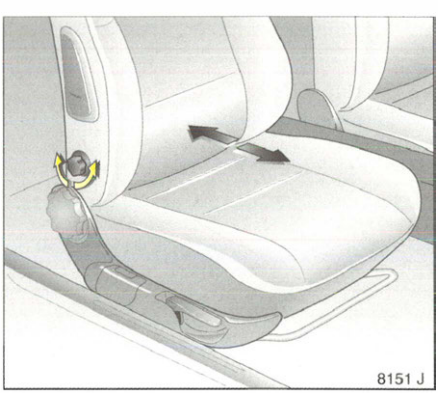
To adjust the angle of the back of the seat, turn the large, toothed wheel illustrated.

CAUTION: To avoid reducing the effectiveness of seat belts it is recommended that the reclining seats be used in no more than a semi-reclined position when the car is moving. The fully reclined position should be used only when the car is stationary.



Lumbar support (if fitted)

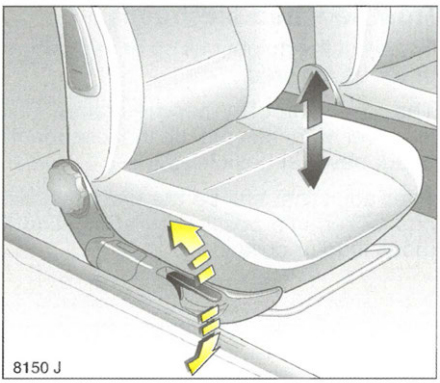
The small wheel on the outside of the seat is used to adjust back support.



FRONT SEAT ADJUSTMENT cont.

Driver's height adjustment (if fitted)

Pump the lever up to raise the seat height, or down to lower the seat.



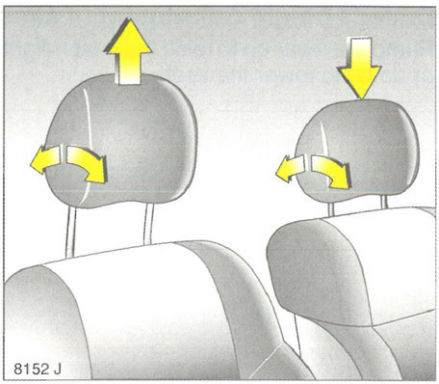
HEAD RESTRAINTS

Front seat head restraints

To adjust the height pull up or push down, or tilt, as required.

The upper edge of the head restraint should be level with the top of the occupant's head; never at neck level.

After adjusting, ensure the head restraint has locked into position by attempting to move it up or down.



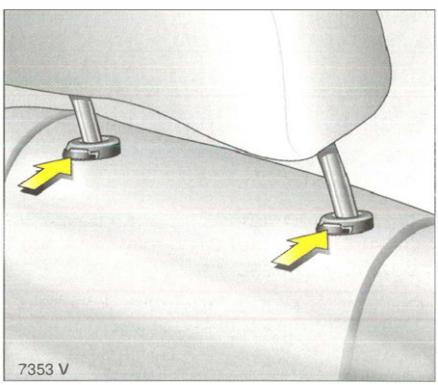
Rear seat head restraints (if fitted)

To adjust the height, pull up the head restraint or press locking springs and push it down.

The upper edge of the head restraint should be approximately at eye level - never at neck level.

After adjusting, ensure the head restraint has locked into position by attempting to move it up or down.

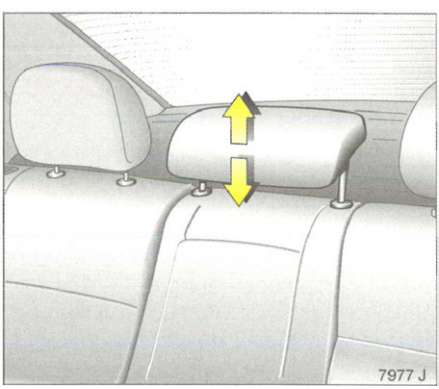
To remove head restraints, release both locking springs while pulling up.



Rear centre head restraint (if fitted)

If the centre seat is not occupied, push the head restraint down to its lowest position by pressing the locking springs and pushing down to improve the rear view.

If the centre seat is occupied, set the head restraint to the first or second position according to the height of the passenger.



REAR SEAT FOLDING

The rear seat may be folded in different positions. To avoid injury from passing cars, always avoid standing on the road side of the car when converting the rear seat.

Refer to Chapter 10, "Towing and Loading" for notes and precautions about loading your car.

Lockable backrests (if fitted)

These prevent unauthorized access to the luggage compartment from inside the car.

Rotary fasteners are located in the luggage compartment on the rear of the backrests and on the cover behind the centre armrest.

To lock: ensure the seats and centre armrest are fully upright and turn the fasteners 90° clockwise.

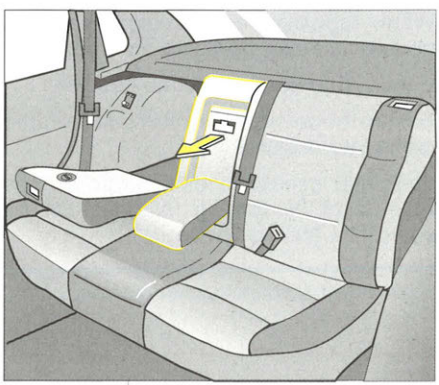
To unlock: turn the fasteners 90° anti-clockwise.

Folding armrest

Ensure lockable-type arm rest cover is unlocked, see above.

Fold down the centre armrest onto the seat cushion. The outer seats can continue to be used for passengers.

When transporting long loads, pull the handle and tilt the armrest cover forwards.



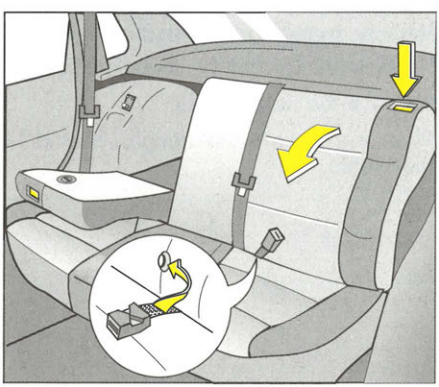
Folding seats

Remove the outer rear head restraints (if fitted), see previous page. Set the centre rear head restraint (if fitted) at its lowest position, see previous page.

Hook the seat belt buckles onto the rear seat backrests.

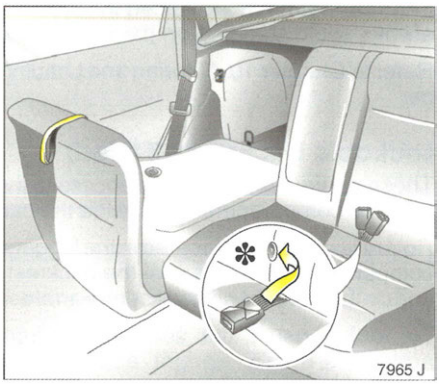
Ensure lockable type seat backs are unlocked, see above.

Unlock one or both rear seat backrests by pushing down the buttons at the top of the seat. Fold down onto the rear seat cushion.



REAR SEAT FOLDING cont.

Converting the rear seats



Remove the outer rear head restraints (if fitted), see page 3-4.

Set the centre rear head restraint (if fitted) at its lowest position, see page 3-4.

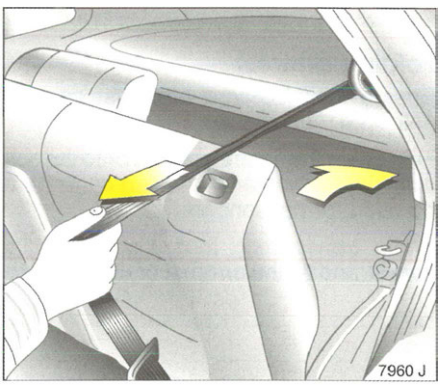
Hook the seat belt buckles onto the rear seat backrests.

Pull up one or both rear seat cushions using straps provided.

Ensure lockable-type seat backs are unlocked, see previous page.

Unlock one or both rear seat backrests by pushing down the buttons at the top of the seat. Fold down onto the rear seat cushion.

Repositioning rear seat backrest



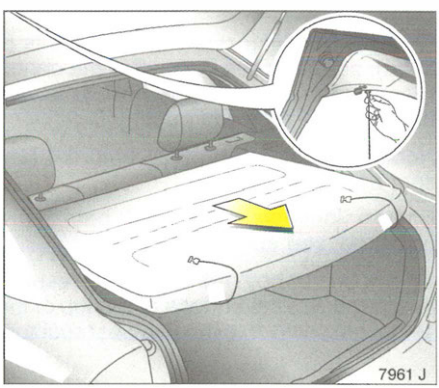
When repositioning rear seat backrest, ensure that seat belts are not trapped.

Ensure rear seats click into position.

Ensure the cover behind the centre armrest clicks into position.

Lock rear seat backrests centre armrest rear cover by turning fasteners on the seat-back 90° clockwise.

Hatch: transporting tall objects



Unhook the cord of the parcel shelf.

Remove the parcel shelf.

Place the parcel shelf (upright) behind the rear seats.

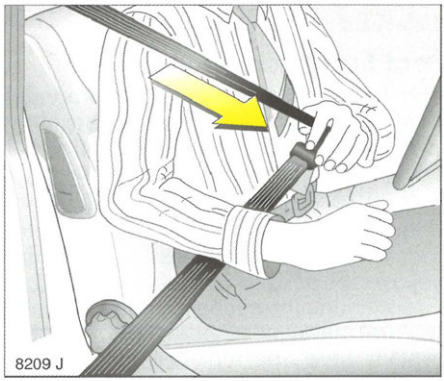
Retractor belts

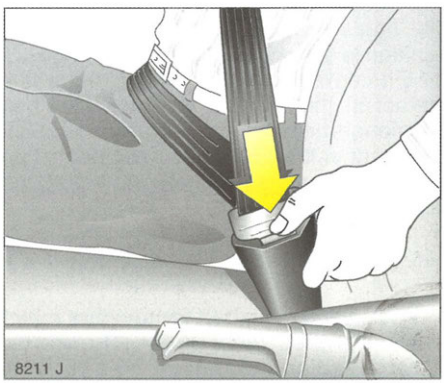
To put on a retractor seat belt, pull the metal tongue across your body and clip it into the buckle. When the metal tongue has locked safely into place you will hear a "click". After fastening, settle the belt at the hip, then tension the belt, by tugging the sash upward. Any extra belt length will retract automatically.

The lap section should be worn as low as possible on your hips, not on your waist. Make sure the sash and lap sections of the seat belt are free from twists and are fitting firmly.

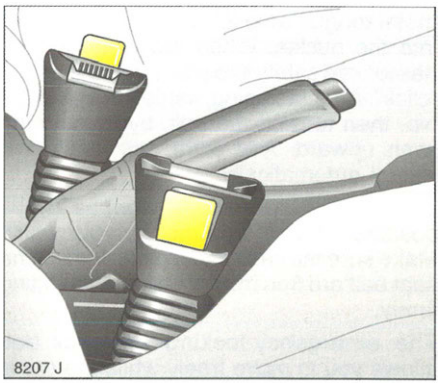
The emergency-locking retractor belt allows you to move freely while the car is travelling normally. The belt will lock immediately on fast braking, impact with a solid object or any quick movement by the wearer.

To undo the belt, press the release button on the buckle and allow the belt to retract. Check that it fully retracts without twisting or turning.





Seat belt tensioners



The front seat belt system incorporates (once-only) belt tensioners. In the event of a head-on or tail-end collision the belt buckles are pulled downwards; the diagonal and lap belts are instantaneously tightened.

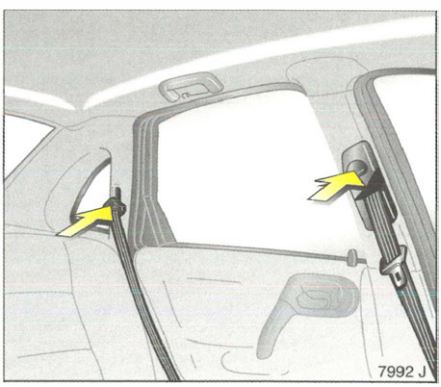
If the belt tensioners have been actuated the symbol on the dash lights up and yellow tabs on the buckles become visible. Even though the seat belt (apart from this feature) may remain operational, the entire system *must* be replaced by a Holden Dealer.

To check that the bulb is working the lights up for a few seconds when the ignition is switched on. If it does not go out or if it comes on during driving, there is a defect in the system, and the seat belt tensioners and/or the air bag systems might not work in the event of an accident. You should consult your Holden Dealer as soon as possible.

To prevent malfunctions, do not place magnetic objects in the immediate vicinity of the centre console, where the electronics for the system are located.

WARNING: The belt tensioners may trigger suddenly and cause injury if they are handled incorrectly. Therefore, front seats and belts should only be removed and disposed by a Holden Dealer.

Seat belt height adjust (if fitted)



- Do not adjust while driving.
- Pull belt slightly outwards.
- Press belt guide (indicated by arrow in illustration).
- Move seat belt guide up or down, as required.
- Release belt guide at required position and ensure belt guide has clicked into position.
- Short people should select a low belt guide position, tall people a higher one. This will ensure, for both safety and comfort, that the webbing of the seat belt fits on the shoulder.

SEAT BELTS cont.

Australian law requires that the driver and all passengers be properly restrained at all times with the seat belts provided in the car. Failure to do so could increase the chance of injury and/or the severity of injury in accidents.

WARNING:

Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.

Care should be taken to avoid contamination of the webbing with polishes, oil and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

It is essential to replace the entire assembly after it has been worn in a severe impact, even if damage to the assembly is not obvious. Belts should not be worn with straps twisted.

Each seat belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

No modification or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

The positioning of the tongue restrictor must never interfere with, or stop, the belt from fully retracting.

CHILD RESTRAINTS

Infant and child restraints

CHILDREN SHOULD BE RESTRAINED AT ALL TIMES WHEN RIDING IN A MOTOR CAR. In some States it is law that children must be belted in, whenever they are travelling in a car in which seat belts are installed. CHILDREN ABLE TO SIT UP should be restrained with regular seat belts or an approved child restraint.

Where children are restrained with the regular seat belt and it is desired to raise their seating position this is to be done only by means of a support which is retained by the belt. NEVER USE A LOOSE CUSHION AS THIS COULD ALLOW SERIOUS INJURY IN THE CASE OF A CAR ACCIDENT.

WARNING: Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses or for attaching other items or equipment to the car.

Only approved child restraint harnesses should be used on anchorage points. See your Holden Dealer for advice about the various types of approved child restraints available.

INFANTS UNABLE TO SIT BY THEMSELVES should be carried in an approved child seat restraint. Check with your local Infant Welfare Centre for availability.

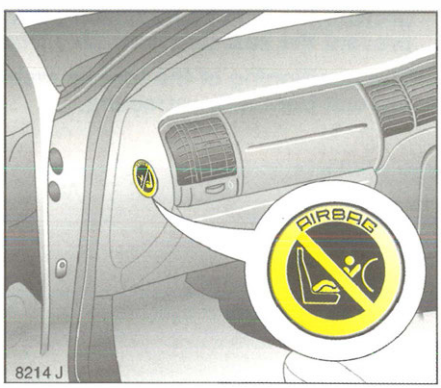
Passenger's side air bag and child restraints

CAUTION:

NEVER install a rear-facing child restraint in the front seat of a car with a passenger's side air bag. The child could be seriously injured if the passenger's side air bag inflates, as the child's head would be very close to the inflating air bag.

Where legally allowable, you may install a forward-facing child restraint in the front seat, but ALWAYS move the passenger seat as far back as it will go.

It is always better to install a child restraint in the rear seat.



CHILD RESTRAINTS

Hatch model

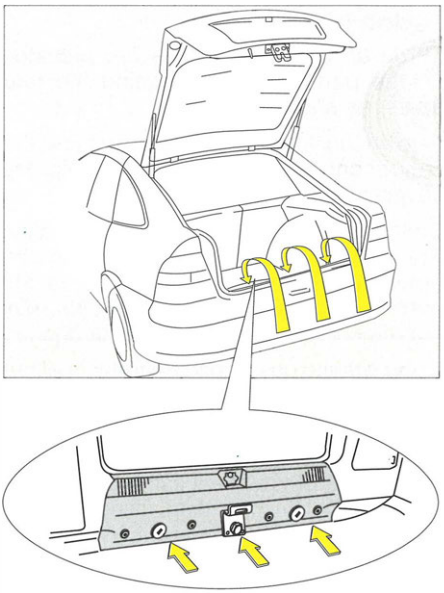
Three anchorage locations are provided in the hatch area, behind the rear seats, as shown.

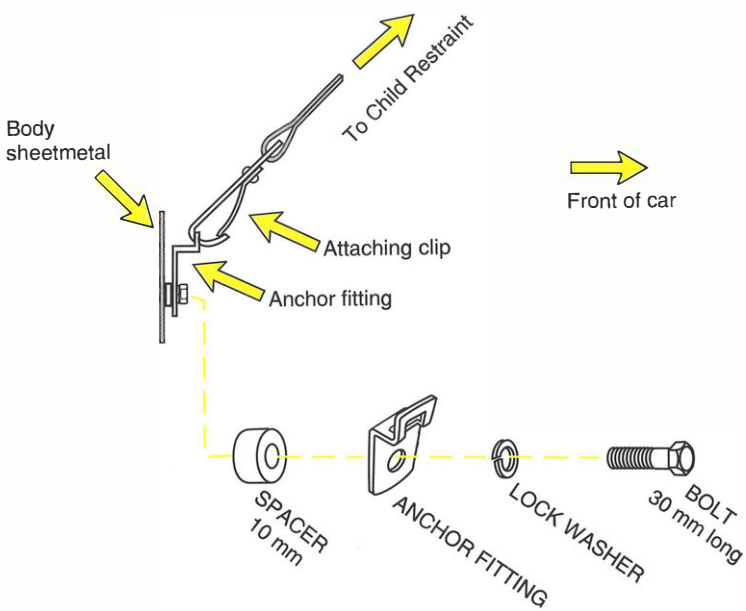
One anchor fitting has been installed in the centre position.

Child restraints approved to Australian Standard AS 1754-1991 (and subsequent amendments) can be clipped on to the centre anchor fitting. Older child restraints may not attach securely to this type of anchor.

If you wish to use a child restraint in either of the outer positions, first remove the cover plug.

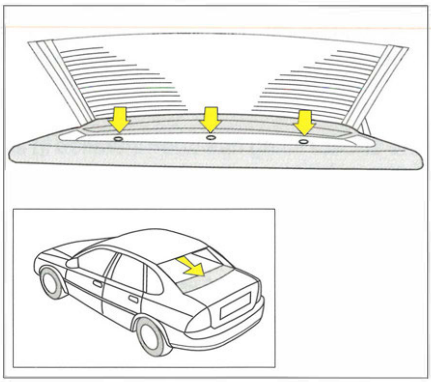
Then, install an additional anchor fitting, using the bolt, spacer and washer supplied with a child seat, as per the illustration below. Ensure that the bolts are securely tightened, to 15~25 Nm, check with your Holden Dealer if unsure.





Sedan model

Three anchorage locations are provided on the parcel shelf, up behind the rear seats, as shown.

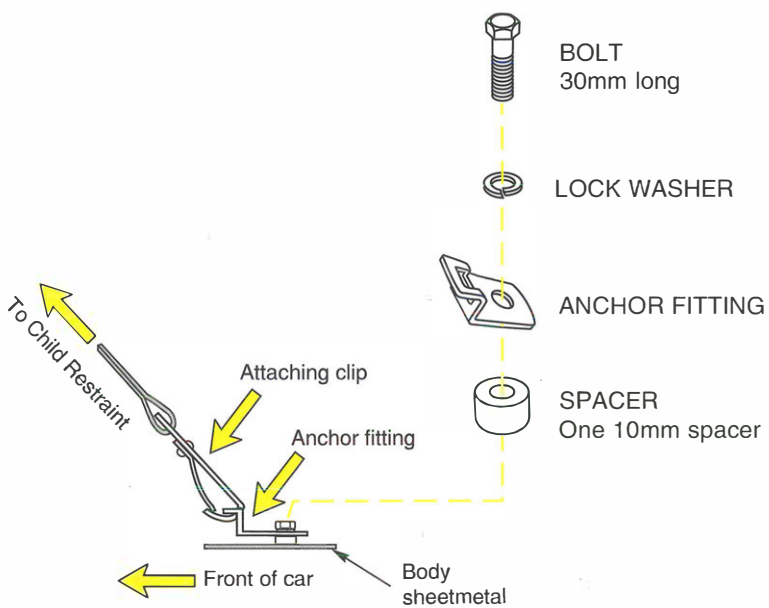


One anchor fitting has been installed in the centre position, protected by a flip top cover.

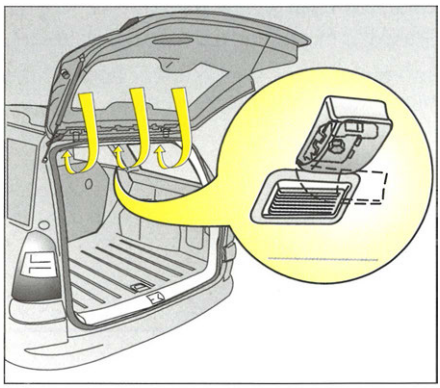
Child restraints approved to Australian Standard AS 1754-1991 (and subsequent amendments) can be clipped on to the anchor fitting. Older child restraints may not attach securely to this type of anchor.

If you wish to use a child restraint in either of the outer positions, first remove the cover plug.

Then, either move the existing anchor fitting supplied in the centre location (remove cover cap from restraint assembly if the Holden accessory rear blind is fitted), or install an additional anchor fitting, using the bolt, spacer and washer supplied with a child seat, as per the illustration below. Ensure that the bolts are securely tightened, to 15~25 Nm, check with your Holden Dealer if unsure.



Wagon model



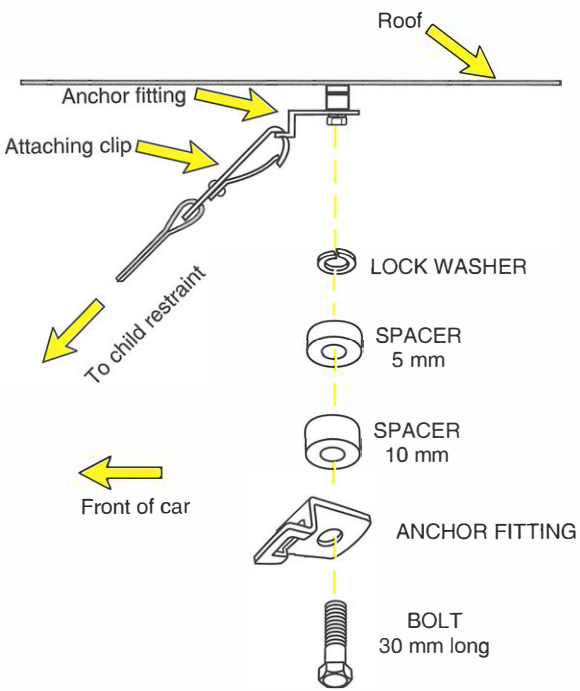
Three anchorage locations are provided on the roof, up behind the rear seats, as shown.

One anchor fitting has been installed in the centre position, protected by a flip top cover.

Child restraints approved to Australian Standard AS 1754-1991 (and subsequent amendments) can be clipped on to the anchor fitting. Older child restraints may not attach securely to this type of anchor.

If you wish to use a child restraint in either of the outer positions, first remove the cover plug.

Then, either move the existing anchor fitting supplied in the centre location or install an additional anchor fitting, using the bolt, spacers and washer supplied with a child seat, as per the illustration below. Ensure that the bolts are securely tightened, to 15~25 Nm, check with your Holden Dealer if unsure.

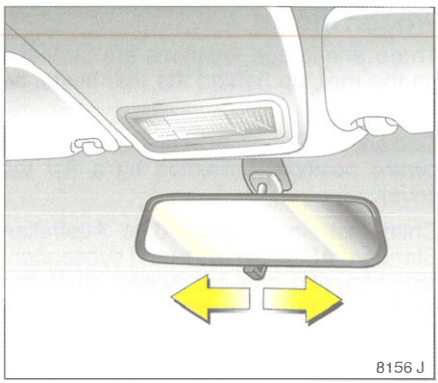


MIRRORS

Internal rear view mirror

Grasp the mirror and move to adjust height.

Swivel the lever on the lower edge of the mirror to reduce dazzle at night.



Exterior mirrors

Switch the top, 'rocker' switch to either left mirror or right mirror, as required.

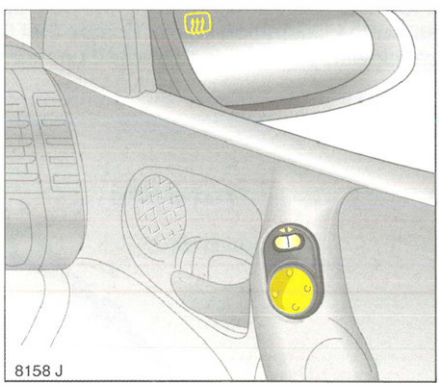
When the ignition is switched on the larger four way knob can be used to adjust the angle of the mirror.

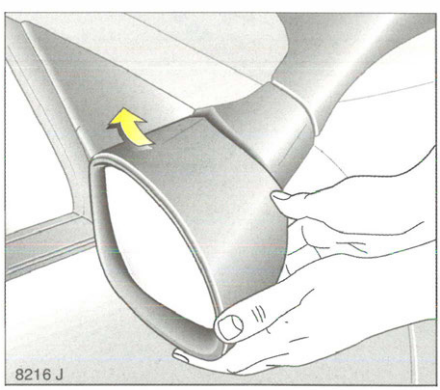
Your passenger's side exterior mirror may be convex shaped, therefore making objects appear further away than they actually are.

For the safety of pedestrians, exterior mirrors will be released from their support under accident-like impact.

Re-engage the mirrors in position by applying slight pressure to the mirror housing.

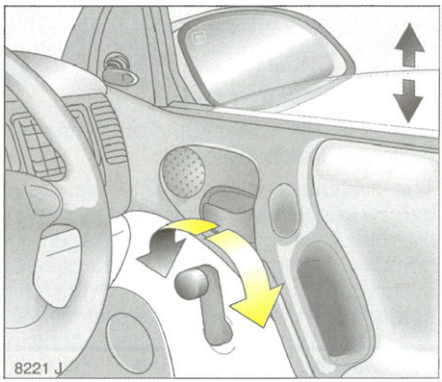
On some models demisting of outside mirrors is provided when the rear window demister is switched on, refer Chapter 1.





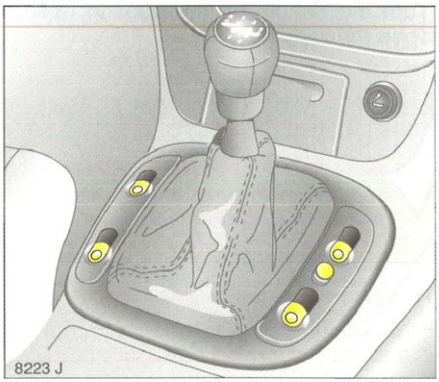
MANUAL WINDOWS

Turn the handle on the door to raise or open the windows.



ELECTRIC WINDOWS (if fitted)

Four switches are provided on the centre console, one for each window. Additional switches for the rear passengers are located on the rear doors.



Lights in the switches glow when the switches are operational.

The switches located on the rear doors can be deactivated/reactivated by moving the child safety switch, located on the console between the left side window switches. If the red section of the child safety switch is showing the switches are deactivated. If the green section is showing the switches are reactivated.

To move a window in stages, tap the appropriate switch. For automatic opening or closing, keep the switch pressed slightly longer before removing your finger. To stop automatic operation, tap the switch again.

If the window glass encounters resistance above half way during automatic closing, movement is immediately stopped and the window will open again.

Automatic opening and closing is not possible after interruption of the power supply (battery/fuse) or low voltage. It must then be reprogrammed.

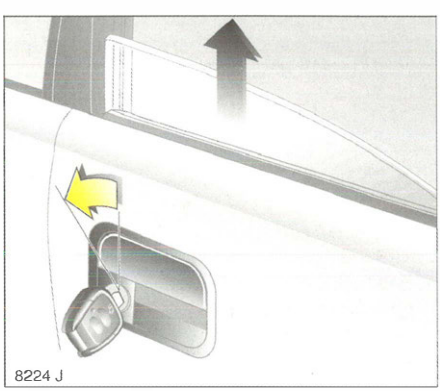
To reprogram: Close doors, switch on ignition, close window and continue to keep switch pressed for at least 5 seconds.

If the system is overloaded, the power supply is automatically cut off for a short time.

Leaving the car

The windows can still be operated after the ignition has been switched off. Once the doors have been closed the windows can no longer be operated from inside.

To avoid risk to children (through incorrect use of electric windows), the driver should remove the key from the ignition when leaving the car.



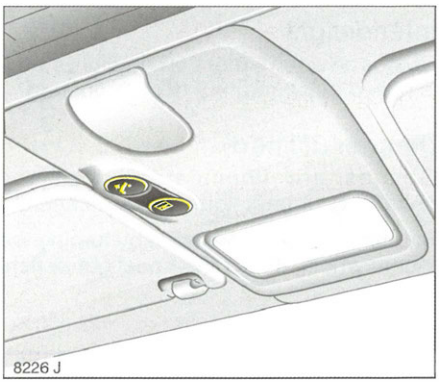
Windows can be closed from outside the car by holding the key in the door locking position until all the windows are closed.

SUNROOF (if fitted)

The sunroof is made up of a sun shade and a glass panel. The glass panel can be opened in two ways, it can be tilted up or slid backwards.

The two buttons for the sunroof are between the sun visors. The buttons are operational when the ignition is ON.

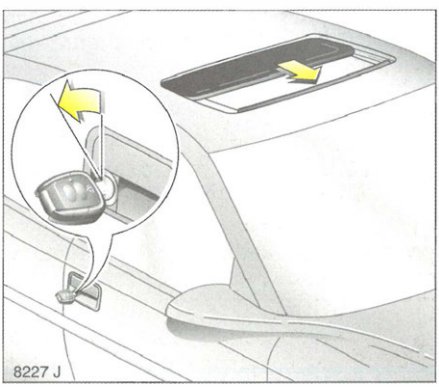
Caution: Be careful when closing the sunroof that hands, heads etc are clear.



To slide open

Press button . The sunroof opens until it reaches the comfort position. Wind noise is reduced in this position.

To open beyond the comfort position, press the button again.



To slide closed

Press button until the sunroof is closed.

Tilting up

Close the sunroof and press button .

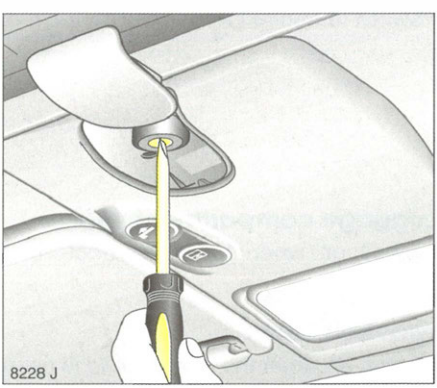
To lower

Press button until the sunroof is closed.

Sun shade

The sun shade can be opened and closed with the sun roof either closed or raised.

When the glass is open, the sun shade is also opened.



Closing the sunroof from outside

Hold the key in the door locking position until the sun roof is closed.

Manual operation

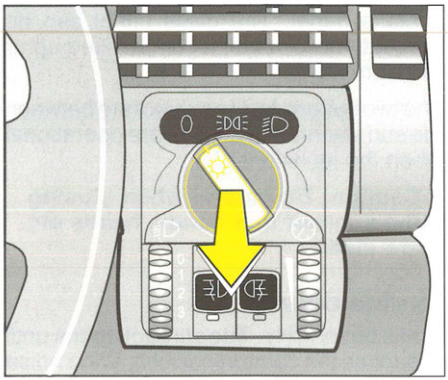
If the electric drive fails the system is protected by a fuse in the fuse box. Until a fault is remedied, the sun roof can be operated as follows:

- Push drive cover to rear.
- Compress sprung central section of drive shaft with screwdriver and turn drive shaft.

INTERIOR LIGHTS

Interior light

Comes on when either the headlight switch is pulled outwards or a door is opened.



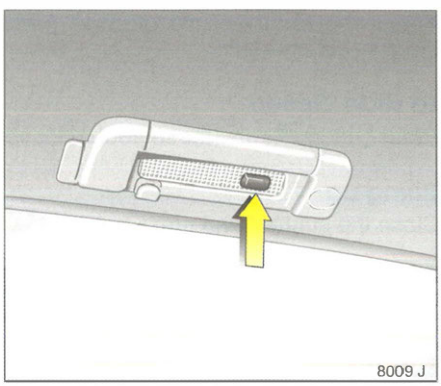
Dimmer (if fitted)

Gauges are illuminated when the headlights or park lights are switched on.

Brightness can be adjusted by turning the thumb wheel, below the headlight switch.

Rear reading lights (if fitted)

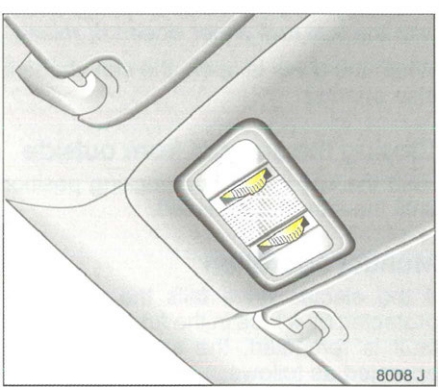
The switch has three positions: OFF, ON and DOOR (light comes on when a rear door is opened).



Front reading lights (if fitted)

When ignition is turned on:

- switch to rear = ON
- switch to front = OFF



Luggage compartment light

Comes on when the hatch/boot lid is opened.

Glovebox light

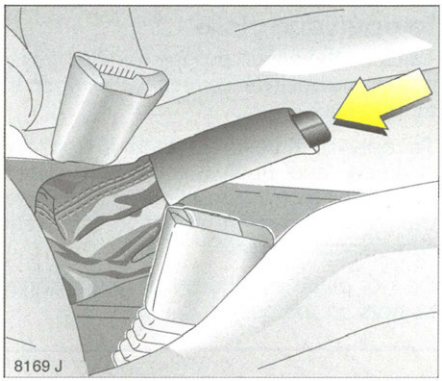
Comes on when the glovebox lid is opened and the ignition is on.

PARK BRAKE

To apply, pull the lever straight up.

To release, pull the lever slightly upwards, push in the release button on the end of the lever and whilst depressed, lower the lever all the way down.

Never drive the car with the park brake applied.



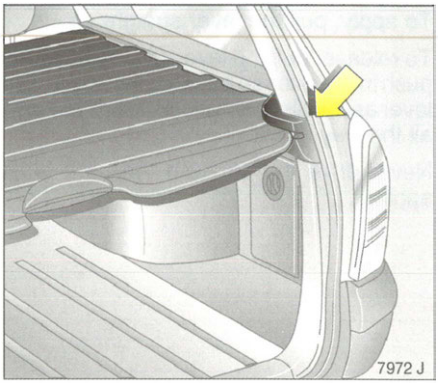
WAGON COMPARTMENT COVER

To open and close

To close the cover, pull the handle back to its limit and lock the cover into the retainers at the sides.

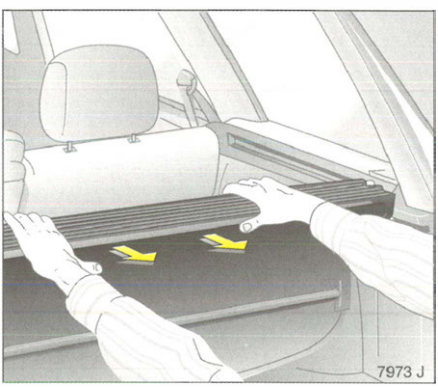
To open the cover, detach it from the retainers and push it towards the seat backrest. Latch the handle from above into the rear cross-member on the load compartment cover.

Do not place any heavy or sharp-edged objects on the cover.



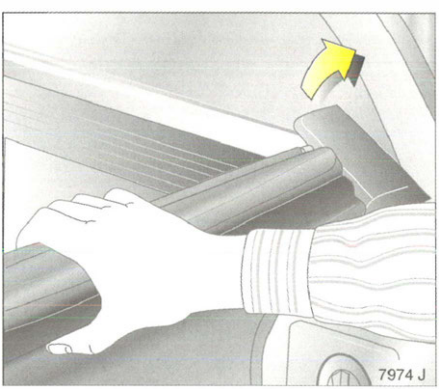
Removing the cover

1. Push the cover forward towards the seat backrest.
2. Pull the folded cover towards the rear into the two guides on the rails as far as it will go.
3. Press the cover together with both hands and pull it backwards under tension. Twist the cover with the two rib end sections upwards and remove it by pushing it forward.



Replacing the cover

Fit in reverse order to removal, ensuring the rib ends engage properly in the guide rails.



Notes

CHAPTER 4

Driving

Page

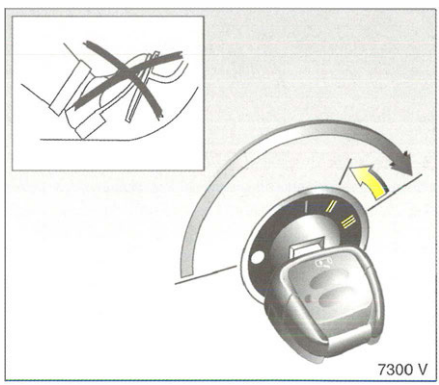
4-2 Engine starting
4-2 Running-in
4-3 Safety
4-4 Automatic transmission
4-6 Manual transmission
4-7 Driving precautions
4-7 Snow chains
4-9 (ABS) Anti-lock Brake System
4-10 Traction Control

ENGINE STARTING

1. Apply the park brake firmly and release only after you have started the engine and are ready to drive off.
2. MANUAL: Depress the clutch pedal and shift the gear lever to Neutral position. The clutch pedal can now be released.

   AUTOMATIC : Move the shift lever to P (park) or N (neutral) position. The engine will not start if it is in any other position.
3. Start the engine as outlined below (with your foot off the accelerator).

   For cold or hot starting the procedure is the same. Simply turn the key to **III** and release when the engine starts. YOU DO NOT HAVE TO DEPRESS THE ACCELERATOR PEDAL PRIOR TO, OR DURING, STARTING. DEPRESSING THE ACCELERATOR PEDAL WILL ONLY INCREASE CRANKING TIME AND WILL NOT HELP THE ENGINE TO START.



If the engine won't start and the check engine warning light on the instrument panel is flashing, turn the ignition key to OFF for at least 2 seconds before attempting to start the engine again.

Running-in (for the first 1,000 km)

Drive your car at various speeds. **Do not use full throttle.** Never allow the engine to labour.

Make good use of all gears. Depress the accelerator pedal a maximum of around three quarters of the available pedal travel in all gears and drive ranges.

Do not drive faster than three quarters of maximum speed.

Unless necessary, try not to brake too hard during the first 200 km or after new brake pads have been fitted.

Switching off the engine

If the engine temperature is very high, e.g. after driving in hilly areas, then allow the engine to idle for approximately two minutes (in order to prevent heat accumulation) before switching off the engine.

The cooling fan may remain on for several minutes. This is normal.

SAFETY

Before entering the car

1. Check that windows, mirrors and lights are clean.
2. Check tyres are not flat.
3. If you intend to reverse, check that the area behind your car is clear.

Before driving off

1. Be sure that all doors are secured.
2. Position your seat for comfortable driving.
3. Adjust rear vision mirrors.
4. FASTEN SEAT BELTS.
5. Check that all the warning indicators light up when you turn the key to start the engine, refer Chapter 1.

   AUTOMATIC ONLY: To move the T-bar away from the "P" position the brake pedal must be depressed and the ignition ON.

   MANUAL ONLY: When starting off on a very steep hill it may be helpful to turn traction control OFF, refer page 4-10.

Parking

1. Apply the park brake.
2. Turn off engine.
3. Automatic transmission: Place in PARK (otherwise the key cannot be removed).

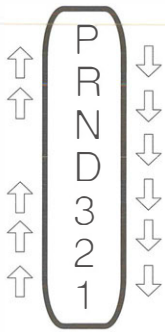
   Manual transmission: Place in FIRST or REVERSE gear.
4. Shut all windows.
5. Switch off exterior lights.
6. Turn ignition key to LOCK and remove the key.
7. Lock all doors.

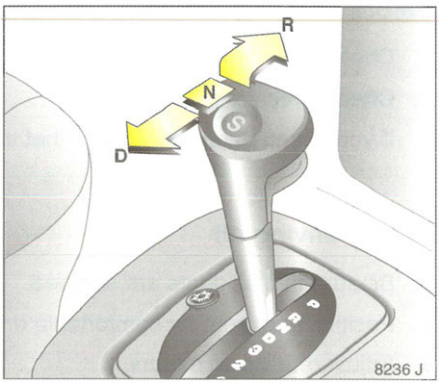
CAUTION: Be careful where you park or drive. As with any car, do not park or operate this car in areas where combustible materials such as dry grass or leaves can come in contact with a hot exhaust system.

AUTOMATIC TRANSMISSION

The transmission lever is located between the front seats. Raise the release bar below the T-bar handle when shifting into any position indicated by the black arrow.

You may shift without raising the handle into any position marked by the outline arrow.





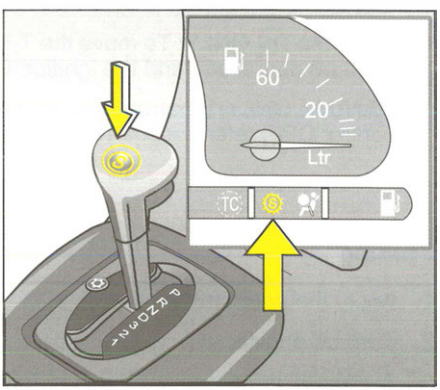
Your foot must be on the brake pedal and the ignition ON before the T-bar can be moved out of the "P" position. Likewise, the T-bar must be in "P" before the key can be removed.

Sports/economy drive

Press the "S" button on top of the T-bar to switch between sports and economy drive programmes.

When the sport programme (higher engine speeds) is selected the indicator light will be illuminated on the instrument panel.

Note that after the engine is re-started and "D" selected, the economy programme is automatically selected again.

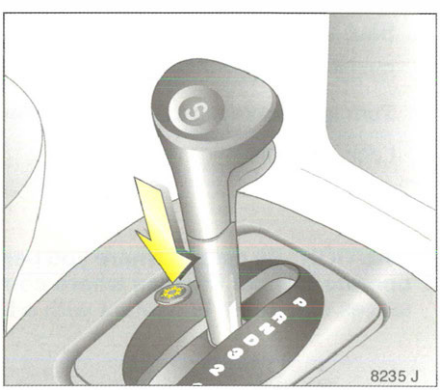


Starting- off aid (if fitted)

In the event of starting-off difficulties on slippery roads press the button indicated. The car will then start off in third gear. The T-bar should be in "D" or "3". The car starts off in third gear.

The starting off aid is switched off:

- by pressing the button again.
- by moving the T-bar to "2" or "1".
- by turning the ignition off.



AUTOMATIC TRANSMISSION

P (park) This stops the front wheels from turning and so should be selected (together with the park brake) when leaving the car. Never select "P" until your car is fully stopped. The brake pedal must be depressed and the ignition ON before the T-bar can be moved away from the "P" position.

R (reverse) Never select "R" until your car is fully stopped. Reversing lights will operate when "R" is selected and the ignition is on. After reversing, make sure the car has fully stopped before proceeding forward again.

N (neutral) This is the out-of-gear position. You may restart a stalled engine while the car is still moving or stopped.

D (fourth) This is the most effective position for normal or freeway driving. The drive position gives maximum fuel efficiency, as the transmission can choose the appropriate gear (1 through to 4) for the load and driving conditions.

3 (third) Third is most effective when overtaking and gives responsive acceleration and deceleration, especially in hilly areas. This position allows the transmission to shift between first, second and third gear as conditions require. Drive (4th gear) is excluded.

2 (second) Use this position when going down a steep gradient to avoid excessive use of the brakes. The transmission will shift between first and second gear as required. Move the lever back into the Drive position to return to normal driving.

1 (first) Use this position when strong braking effect is needed when going down a very steep hill. Remember to move the T-bar back to Drive position so that the transmission will again up shift into higher gears.
If 1st gear is selected at too high a speed then the transmission remains in 2nd gear until you have slowed down sufficiently.

Notes

- If selecting a lower gear than "D" while driving, ensure car speed is sufficiently reduced before moving the T-bar.
- Don't rev the engine with the brakes on in either "1", "2", "3", "D" or "R". This will overheat the transmission.
- Don't rev the engine to hold the car on a slope. Use the brakes.
- Don't coast the car in "N" - this lessens your control and the engine braking power.
- Refer Chapter 7 when checking automatic transmission fluid level.
- NOTE: The engine will not start unless the selector is in "P" or "N".
- **FAULT**: If the car suddenly will not accelerate as usual, or will not shift down to a lower gear when you press the accelerator pedal to the floor, or the automatic transmission fault light (beneath the clock) is illuminated, then a fault is indicated in the transmission. You should use the T-bar to manually shift through the gears ("1", "2", "3", "D"). Consult a Holden Dealer as soon as possible.
- NEUTRAL IDLE CONTROL. This feature is designed to reduce fuel consumption and help prevent vibration from the transmission when idling and stationary. Neutral Idle Control electronically switches the transmission into neutral (without you having to move the T-bar) when the engine is idling in a forward gear (1,2,3 or D) and the brake pedal is depressed. When the brake pedal is released (to move from stationary) the transmission electronically switches back to the selected position of the T-bar.

MANUAL TRANSMISSION

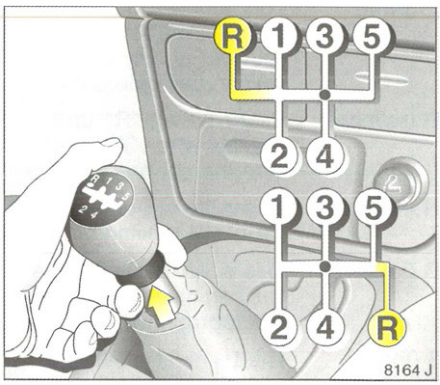
This system has 5 forward gears and a reverse gear. The shift pattern is also found on the top of the gear shift lever.

When selecting fifth gear you must shift the gear lever sideways against light spring pressure in order to pass into the gear.

When shifting from 5th to 4th gear do not exert any pressure towards the left.

To select reverse gear, lift the ring beneath the knob on gear shift lever and move the lever into the reverse position.

If the gear does not engage easily, then release and depress the clutch pedal, or try moving to another gear, before trying again.



Recommended shift speeds

The recommended change speeds at which upwards gear changes should be made (for maximum economy) are shown in the chart.

Upshifting at higher road speeds will be necessary according to varying driving conditions such as load, road gradient, during overtaking and when other than light acceleration is required.

Recommended change speeds for maximum economy		
Gear change	2.0 litre engine	2.2 litre engine
1st - 2nd	20 km/h	15 km/h
2nd - 3rd	30 km/h	25 km/h
3rd - 4th	40 km/h	40 km/h
4th-5th	55 km/h	55 km/h

Operating notes

- When shifting from one gear to another, be sure to depress the clutch pedal fully to avoid clashing and possible chipping of the transmission gears.
- Never attempt to engage reverse gear until the car has completely stopped. A slight pause (a few seconds) between depressing the clutch pedal and moving into reverse gear is desirable to allow all the rotating components to stop and avoid gear clashing. Whenever reverse gear is selected with the ignition ON, the reversing lights will operate.
- Shift the gear lever with a moderate effort to allow time for the transmission synchronizers to work properly.
- Do not drive with your foot resting on the clutch pedal. This will cause substantial clutch wear.
- When stopped on an incline do not hold the car by slipping the clutch. Use the park brake or brake pedal.
- To maintain safe speeds on a steep downgrade and to reduce brake wear and overheating, shift into a lower gear before starting the descent.
- Do not over-speed the engine when shifting down to the next lowest gear.
- When starting off on a very steep hill it may be helpful to turn traction control OFF, refer page 4-10.

DRIVING PRECAUTIONS

Brakes

- Power assisted brakes, which are fitted to your car, utilise vacuum from the engine when it is running. Never let the car run downhill without the engine running.
- Driving through water may affect performance. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with an assured clear distance ahead until brake performance returns to normal.
- Brake pedal travel should not be obstructed by ill-fitting floor mats or any other material under the pedal which causes interference with normal pedal movement.
- Your seat should be positioned so that you can push the brake pedal.

Power steering

If the power steering is rendered ineffective because the engine has stalled, the drive belt broken or if the pump reservoir is empty of fluid, the car can still be steered. However, due to the much greater effort required to steer, it is recommended that you have the problem fixed promptly.

Loose articles

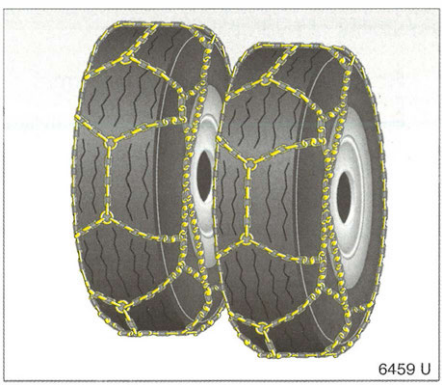
Do not leave loose articles or luggage in the passenger compartment. Whenever possible, loads stowed in the luggage compartment should be firmly secured.

Tyre traction

A decrease in driving, cornering and braking traction occurs when water, snow, ice, gravel or other materials are on the road surface. Driving practices and car speed should be adjusted to the road conditions.

Snow chains

- Vectras are 'front wheel drive' cars, and as such, snow chains are only fitted on the front (driving) wheels.
- Only fine-linked chains, not protruding more than 15 mm on the tyre tread and inside of the tyre (including the chain lock) should be used.
- Depending on design, large hub caps may come into contact with parts of the chains. In such cases, remove the hub caps.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CAUTION:

Tyre chains can only be used at speeds up to 50 km/h and, when travelling on roads that are free of snow they should only be used for brief periods, since they are subject to rapid wear on hard roads and may snap.

Due to lack of clearance, tyre chains may not be used on 205/60 R 15 tyres.

DRIVING PRECAUTIONS

Driving in mountainous terrain or with trailer/caravan

The cooling fan is driven electrically. Its cooling capacity is therefore not dependent on the engine speed. At high engine speeds a lot of heat is produced and at low engine speeds correspondingly less.

When driving uphill, therefore, do not shift down into a lower gear whenever the car can still climb the hill in the higher gear.

Battery care whilst driving

When driving slowly or when the car is stationary, e.g. in slow urban traffic, stop-and-go traffic or traffic jams, turn off all unnecessary electrical loads where possible (heated rear window, auxiliary headlamps etc.).

When starting the engine, depress the clutch pedal so that transmission resistance is eliminated and the starter motor and battery are relieved.

Tyre grip

A decrease in tyre grip occurs when water, snow, ice, gravel or other materials are on the road. Driving speed should be adjusted to the road conditions.

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tyre and road surface. This phenomenon, known as hydroplaning, may cause partial or complete loss of grip, which affects steering and braking. To reduce the possibility of hydroplaning:

- Reduce speeds during rainstorms.
- Replace tyres when tread wear indicators are visible.
- Check that tyres are properly inflated.

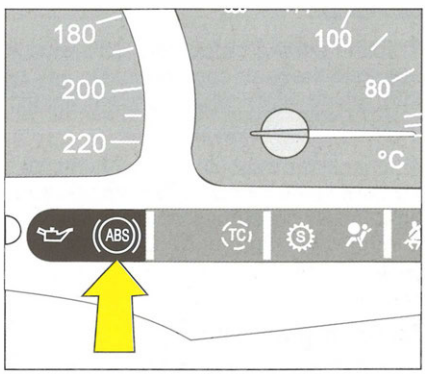
ABS (if fitted)

ABS (Anti-lock Brake System) continuously monitors the car's brake system and prevents the wheels from locking, irrespective of the road conditions and tyre grip. It starts to regulate the braking effect as soon as a wheel shows a tendency to lock. The car remains steerable, even in the event of panic braking, for instance on bends or when swerving to avoid an obstacle.

However, DO NOT let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by safe driving.

In an emergency braking situation the driver should keep full force on the brake pedal, without 'pumping' the brake pedal. 'Pumping' the brake pedal can reduce brake efficiency when ABS is controlling the braking.

The ABS warning light is illuminated for a few seconds when the engine is switched to position II (ignition ON). If it does not go out, or if it comes on during driving, there is a defect in the ABS. The car's brake system remains operational but without ABS assistance. You should consult your Holden Dealer as soon as possible.



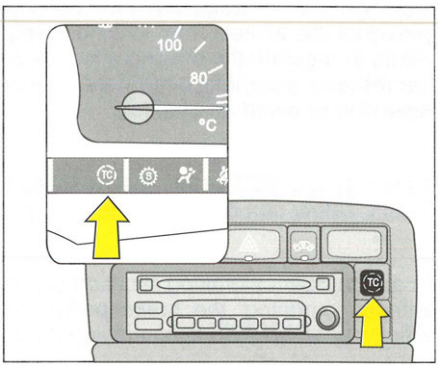
The braking effect is regulated by the ABS every millisecond during braking.

When your car is in a critical braking condition ABS will make itself noticeable through pulsing of the brake pedal and the noise of the regulation process, thereby reminding you to match your speed to the road conditions, even though it is keeping control of the braking.

Shortly after driving off again, the system performs a self check, which may be audible.

TRACTION CONTROL (if fitted)

What TC does



Traction control prevents the driving wheels from spinning. As soon as even one driving wheel starts to spin, traction control reduces the power from the engine and applies the brakes, as necessary. This can improve the car's steering, particularly on snow and ice, as well as on wet or slippery roads.

The "TC" light on the instrument panel will start flashing when traction control is controlling wheel spin, indicating that the car is now in a critical situation. During the control operation the engine power output is reduced (the sound of the engine changes).

Traction control helps you to keep control of the car and reminds you to match your speed to the road conditions. Do not, however, let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style.

To check that the bulbs are working the TC warning light on the instrument panel will light up for a few seconds when the ignition is switched on. If the TC warning light does not light up, or if it comes on during driving, a fault is indicated in the system and traction control will no longer be operational. You should contact your Holden Dealer.

Switching off

In certain circumstances (e.g. if the car is bogged and could be "rocked out") it may be helpful to disable the traction control system. This is achieved by pressing the TC button, located near the transmission selector. The TC warning light will then light up to show that traction control is no longer operational.

Starting off on steep hills The following applies with a manual transmission only, if starting off on a very steep hill and facing upwards. In these circumstances some wheel spin may assist the car to drive off. Therefore, if you experience difficulties the traction control system can be turned OFF, otherwise the system will sense any wheel spin, and so reduce engine power.

After driving off, the traction control system should be turned back on.

Switching on

The system can be switched on again by pressing the TC button, or when the ignition is next turned on.

CHAPTER 5

Fuel

Page

5-2 Carbon monoxide caution

5-3 Petrol filling

5-3 Fuel Tank capacities

5-4 Emission Control

5-5 Reducing fuel consumption, including overrun cut-off of automatic transmissions.

EXHAUST WARNING - CARBON MONOXIDE POISONING

Exhaust gases can produce carbon monoxide, a dangerous gas, which can cause unconsciousness and even death to both humans and animals.

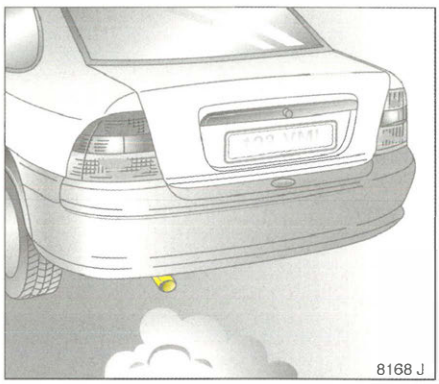
You could inhale the gases if the exhaust system on your car is faulty.

To protect against exhaust gases entering the car, the exhaust system and body should be inspected:

- each time the car is serviced

- whenever a change is noticed in the sound of the exhaust system

- whenever the exhaust system, underbody or rear of the car is damaged.



Take the car to your Holden Dealer if you think your car needs inspecting for any of the above reasons.

DO NOT SIT (OR LEAVE THE CHILDREN OR PETS) IN A PARKED CAR FOR ANY EXTENDED PERIOD OF TIME WITH THE ENGINE RUNNING. DO NOT RUN THE ENGINE IN AN ENCLOSED AREA (SUCH AS THE GARAGE) ANY LONGER THAN IS NEEDED TO MOVE THE CAR.

Driving with the hatch/boot/tailgate open is not recommended. If you must travel with hatch/boot/tailgate open, close all windows, ensure that the heater controls are set to outside (rather than re-circulate) with air directed to the face and the fan on the highest speed. Do not exceed 50 km/h unless necessary.

When the car is driven for the first time, wax and oil on the exhaust system may evaporate, producing smoke-like emissions which should not be inhaled. Allow wax and oil to evaporate while the car is in the open air.

PETROL

CAUTION:

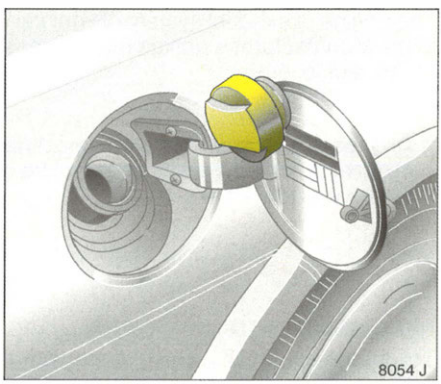
- **Petrol should be regarded as extremely flammable and highly explosive.**
- **Always turn off the engine when refuelling.**
- **Do not smoke or allow open flames or sparks near the car when refuelling.**
- **If petrol fumes are smelt while driving, the cause should be found and corrected without delay.**

The petrol filler is located on the driver's side of the car.

The fuel filler is unlocked when the doors are unlocked and locked when the doors are locked. Remove filler cap by turning anticlockwise.

After refilling, securely tighten the cap clockwise and close the flap.

Refer to Chapter 6 for emergency opening of the petrol filler if the central locking is not working.



Tank capacity = 60 litres

Petrol requirements R.O.N. (Research Octane Number)

2 litre engine: use unleaded petrol of at least 91 octane rating.

2.2 litre engine: use unleaded petrol of at least 91 octane rating.

2.5 litre engine: use unleaded petrol of at least 95 octane rating (PREMIUM, HIGH OCTANE).
If premium unleaded petrol is not available, normal unleaded (91 rating) can be used, provided that heavy engine loads are avoided, such as driving at high speed, towing in hilly areas or loading up the car excessively.

Over filling of the petrol tank can affect the evaporative Emission Control System and can also result in a smell of petrol inside the car. Therefore, don't add any more petrol after the petrol filler first clicks off (or petrol blows back) - as this allows room for the petrol to expand inside the tank.

Wipe off any overflowing petrol immediately from the car; spray or splash with water (close the fuel opening before spraying with water).

EMISSION CONTROL

Your car is fitted with emission control systems which are designed to reduce the amount of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) that are emitted from the engine and fuel system into the atmosphere. Hydrocarbons and oxides of nitrogen, when exposed to sunlight under certain conditions, contribute to photochemical smog. In addition, carbon monoxide is toxic when it becomes highly concentrated in the air.

Owner responsibility

Cars sold and serviced within Australia have been designed to comply with Australian Design Rules and State Regulation emission requirements.

The engine or exhaust system of your car must NOT be modified in any way. Any change to the Manufacturer's design may increase the emissions or otherwise defeat the intent of the regulations.

Any person who removes, modifies or hinders any part of the emission control system fitted to a car will be contravening regulations. It is also illegal to drive such a car.

Maintenance requirements

To ensure continuing compliance with the regulations you must maintain your car's emission control system as per your car's service manual, at the frequency shown in the Holden Maintenance Plan in Chapter 12.

It is recommended that the necessary servicing be performed by an authorised Holden Dealer who has the specialised servicing equipment and trained personnel available to ensure that the adjustments and services specified are carried out.

Petrol filler nozzle restrictor

To help the atmosphere, your car has been designed to operate on UNLEADED PETROL. A petrol nozzle restrictor is fitted to ensure that only UNLEADED petrol is used. This allows the thinner, unleaded petrol nozzle to open the hinged flap, so that petrol can be added to the tank. The leaded petrol nozzle is wider and therefore cannot open the flap. The use of fuel other than unleaded fuel will seriously damage the fuel system of your car (particularly the catalytic converter and oxygen sensor) and may void your Warranty.

REDUCING FUEL CONSUMPTION

Engine

Maintain the engine in peak mechanical condition by having it serviced regularly in accordance with the Holden Maintenance Schedule, refer Chapter 12. This will ensure items such as the spark plugs, air cleaner, etc. are maintained for minimum fuel usage and peak engine performance.

Tyre pressure

Inadequate tyre pressure costs money in two ways: for more fuel and increased tyre wear. Keep the tyres at the recommended pressures.

Wheel alignment

Maintain correct front wheel alignment. Incorrect alignment makes the front wheels drag and increases fuel consumption.

Warm ups and idling

Avoid long engine warm ups. They are unnecessary and waste fuel. An engine reaches its efficient operating temperature most effectively when driving.

You should also avoid long engine idling. If your have to wait for more than a couple of minutes it is worthwhile to switch off the engine and conserve fuel. Three minutes of idling corresponds to approximately 1 km of driving.

Accelerating, driving and braking

Accelerate gently - avoid rapid starts, sudden bursts of speed and full throttle acceleration - they're certain fuel wasters.

Drive the car at steady speeds where possible (after run-in). It is desirable to reach top gear as soon as possible, but under no circumstances should you force the engine to labour in top gear.

Riding the brake

"Riding the brake" by resting your foot on the brake pedal when you do not intend to brake can cause overheated brakes. This can wear out the brake pads faster, damage the brakes and waste fuel.

Air conditioning

Turn off the air conditioning, when not required, to reduce fuel consumption.

Roof racks and ski-holder

Roof racks and ski-holders can increase fuel consumption by 1 litre per 100 km or more, due to the increased air resistance. They should therefore be removed when not in use.

Loading

Unnecessary weight increases fuel consumption, especially when accelerating. In city traffic, a load of 100 kg can increase fuel consumption by 0.5 litres per 100 km.

Overrun cut-off (auto trans. only)

This feature shuts off the fuel supply during overrun, e.g. when the car is being driven down long hills or during braking.

To enable the overrun cut-off to come into action, do not use the accelerator pedal or shift to a lower gear.

CHAPTER 6

Emergencies

Page

6-2 Accidents
6-3 Medical assistance
6-4 Flat tyre
6-10 Engine overheating
6-12 Flat battery
6-14 Air bags
6-16 Towing a disabled car
6-20 Fuses
6-21 Bulb replacement
6-27 Fuel filler

Your new car is covered for 3 years by 24 hour Roadside Service, refer Chapter 9.

ACCIDENTS

All motorists are advised to learn what to do at the scene of an accident, particularly where persons are injured. Injured people can choke to death if their air passages are not cleared. They can bleed to death unless the bleeding is stopped. They may require mouth-to mouth resuscitation or may have to be moved, even though badly injured. It is important that you understand how to avoid further damaging an injured neck or back or other broken limbs. In all cases, ensure safety for the rescuers, victims and bystanders. The following notes may help.

Part 1. Accident - being involved.

If you are involved in an accident you are advised to do as follows:

Stop immediately and remember to turn off the engine and apply the park brake.

Remember that time is vital. Remain calm and alert. Think quickly and clearly.

Give all possible assistance to all injured persons (see Part 3. Medical assistance).

Send for police and ambulance if anyone has been injured. Give information as accurately as possible. Give the exact location, the number of injured people and a brief report on the overall situation.

Perhaps take charge of the situation.

Warn all other traffic approaching the scene. Turn off all ignition switches. Stop any smoking near spilt petrol. In darkness, try and light up the area to warn others - use a torch, headlights etc. Do not use flammable items.

Clear the road of accident debris.

Exchange your name, address, car registration number and the car owner's name and address with the other parties involved in the accident.

If damage to property only has occurred, report the facts to the owner of the damaged property, to his or her representative, to any police present at the scene or to the nearest Police Station.

Try to note all important facts because such details may be important if needed later.

Part 2. Accident - being a witness

If you witness a road accident or it becomes your task to stop and help at the scene of an accident:

- Keep in mind that an observant witness can prove most helpful. Some day you yourself might be very glad of help from a witness.
- DO NOT stop at the scene of an accident just to be a spectator.
- Where other people are already in attendance and giving assistance, you should stop only if you can contribute assistance.
- Give what assistance you can to any injured persons. (See Part 3. Medical assistance).
- Follow most of the steps suggested in Part 1. Perhaps you may have to take charge of the accident situation.

ACCIDENTS

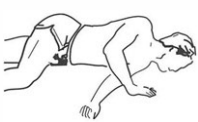
Part 3. Medical assistance

Keep calm and think clearly. Your experience may not be much but do your best.

- Look after the unconscious person first. Check airway, breathing and circulation. If no breathing, then check if air passages are clear, i.e. nose and mouth. Use your fingers to clear air passages if necessary. If the air way is clear then mouth-to-mouth resuscitation may be needed at once.

Unconscious people can choke.
Carefully turn to one side.
Tilt the head back slightly.
Wipe out the mouth with your finger to remove blood, vomit, broken teeth or dentures.

- You must be most careful in moving an injured person. Often it is best not to move at all but in conditions of danger, this is not always possible. Serious and permanent damage can be done to an injured neck or back if not supported during movement. NEVER BEND OR TWIST A NECK OR BACK. KEEP THEM STRAIGHT. All injured limbs require support when an injured person has to be moved.
- Provided it is not dangerous to do so because of other injures, an unconscious person will do best in the position illustrated here.



Lay the person on one side and - if it will not aggravate any injuries - then:
Bend the uppermost knee until the thigh is at right angle to the body.
Bend the uppermost arm and elbow so that the hand lies near the face.
Gently pull the underneath arm so that it rests straight on the ground free of any body weight.

- Try to stop bleeding by applying direct pressure, using your hand, or by pressing torn flesh together. Use any clean cloth available. Fold cloths to make pads. If necessary press one pad on top of another. Keep pressure around edges of a wound BUT NEVER USE A TOURNIQUET.
- Shock may be treated by reassurance, relieving pain, controlling any bleeding and keeping the injured person warm but not hot. Best not to give any fluids and NEVER ALCOHOL.
- If the injured person is in danger and has to be moved, try and have three or four people help and concentrate on not bending or twisting the neck, spine and injured limbs. Keeping the neck and spine straight is most important.

FLAT TYRE

If using a jack other than the one supplied with the car, refer Chapter 7 for lifting positions.

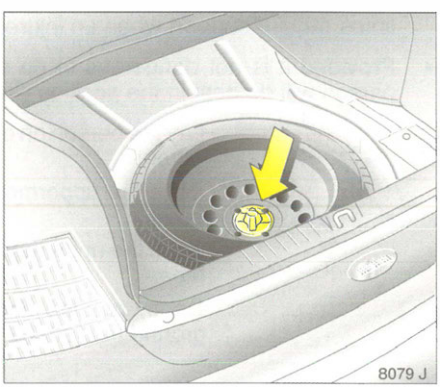
CAUTION:

- **Use the jack only for lifting the car when changing wheels.**
- **Never get beneath the car when it is only supported by the jack.**
- **Do not start or run the engine while the car is only supported by the jack.**
- **All passengers should be out of the car when it is being jacked.**
- **Use the jack only at the designated lifting points. Use in other locations could damage the car.**
- **The car should only be jacked on hard, level surfaces.**

1. Park on level surface, ensure wheels are pointing straight ahead and set parking brake firmly.
2. Remove the ignition key (to lock the steering) and place manual transmissions in REVERSE or FIRST gear, automatic transmissions in PARK.
3. Remove the spare wheel and tools:

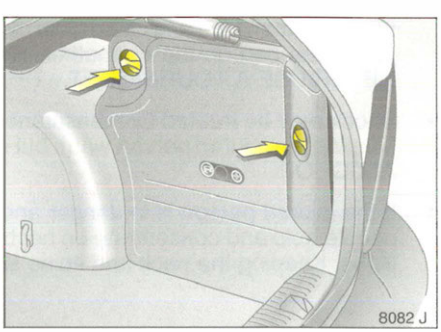
   HATCH

   Lift up the floor cover, undo the wing nut and remove the spare wheel, jack, wheel wrench and (for GL models) the wheel trim removing tool



   The jack, and wheel wrench are stowed in a storage space on the right side of hatch area.

   To open the cover, turn the fasteners a quarter of a turn.

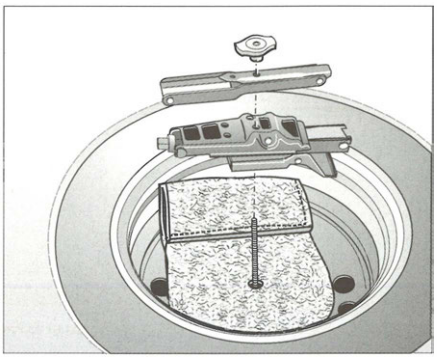


FLAT TYRE cont.

Remove the spare wheel, jack and jack handle:

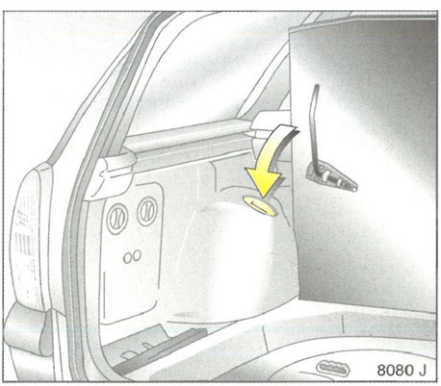
SEDAN AND WAGON

Lift up the floor cover, undo the wing nut and remove the spare wheel, jack and jack handle.



WAGONS: The felt pouch shown in the illustration is for storing the eye bolt and screwdriver for wagons only, refer page 6-17.

WAGONS ONLY: The floor cover for the wagon models can be secured upright by folding down the lever shown on the underside of the floor cover.

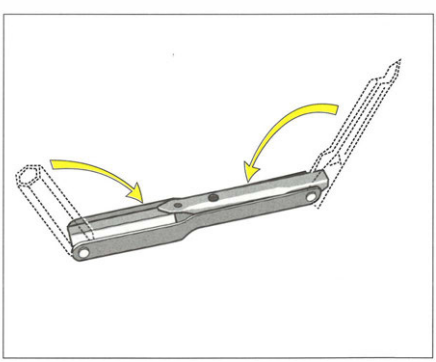


4. SEDAN AND WAGONS only:

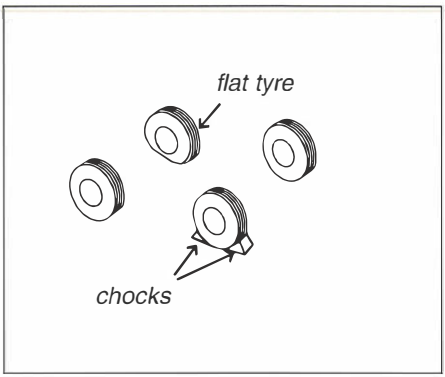
   The jack handle is also used to remove the wheel bolts and to remove full wheel covers.

   Unfold the jack handle as shown.

   Hatch models have separate tools supplied for these requirements.



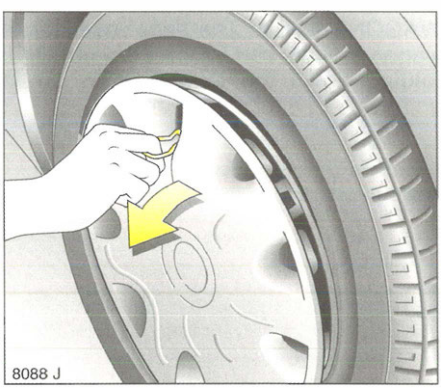
5. Chock the wheel diagonally opposite the flat tyre by placing wedge blocks, any available blocks of wood or rocks behind and in front of it.



6. **Remove the wheel trim**:

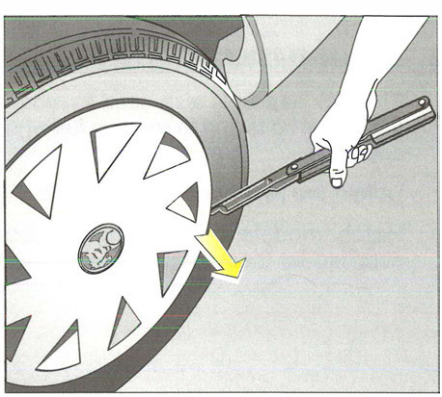
   Hatch with full wheel cover:

   Remove the wheel cover using the tool in the car tool kit.



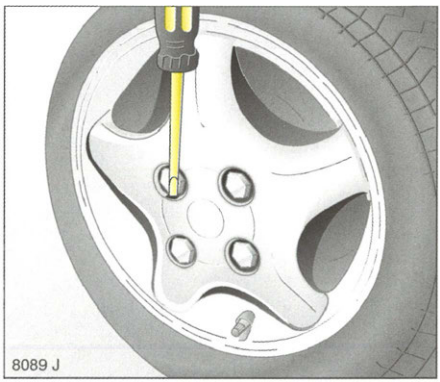
   Sedan and wagon with full wheel cover:

   Remove the wheel cover with the end of the jack handle.



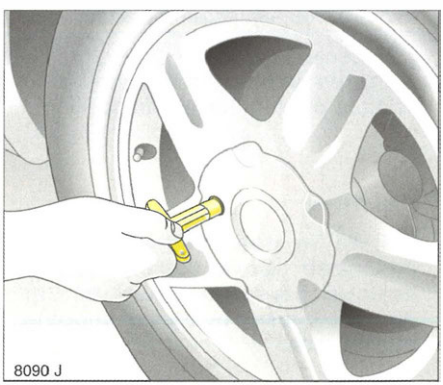
Alloy wheels (if fitted):

Use the tool included with the vehicle kit to lever off the hub cap.

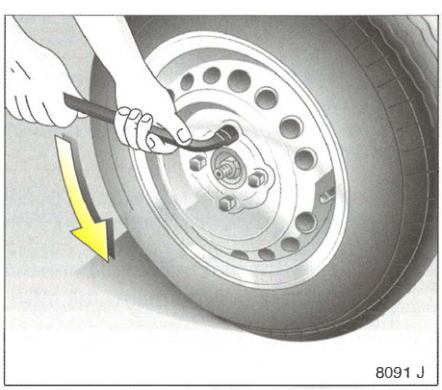


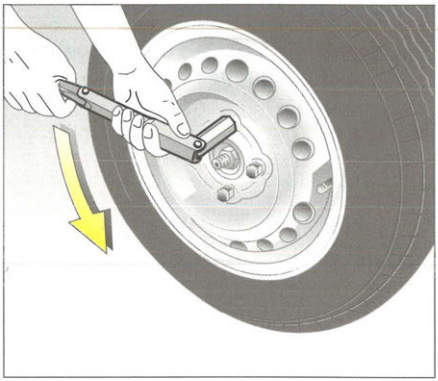
Alloy wheels with locks:

Use the tool included with the vehicle kit to unlock the hub cap before removing the hub cap.



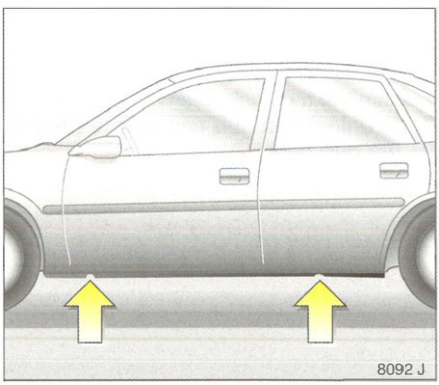
7. Loosen (but do not remove) the wheel bolts with wheel bolt wrench (for hatch models) or the jack handle (for sedan and wagon models, see over the page).





8. Semicircular cut outs on the lower edge of the car's body indicate the points where the jack is to be placed.

   On some models the jacking points are covered by flaps, which must be removed before placing the jack in position.



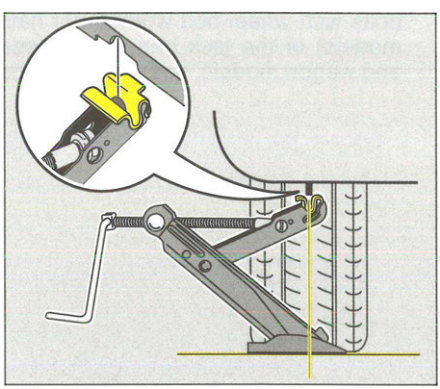
CAUTION:

Failure to position the jack as described above could result in serious personal injury or car damage caused by the car slipping off the jack.

9. Position the jack in the recess that is nearest the flat tyre.

   HATCH MODEL JACK: Ensure that the jack claw surrounds the semicircle cutout in the car and jack base **is in line with the claw of the jack.**

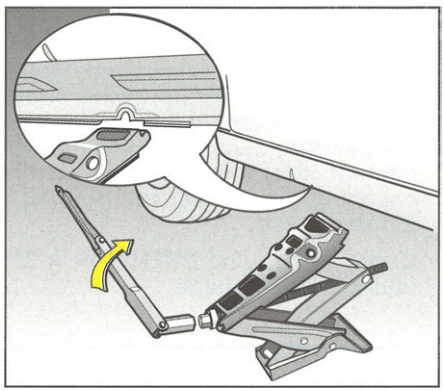
   Raise the car by turning the crank handle, until the tyre is clear of the ground. When turning the crank handle, make sure that the edge of the jack base that is touching the ground is directly below the claw of the jack.



FLAT TYRE cont.

SEDAN AND WAGON JACK: Ensure that the jack claw surrounds the semicircle cutout in the car .

Raise the car by turning the crank handle, until the tyre is clear of the ground.



10. Remove the wheel bolts and place together in a dry spot, to avoid getting dirt in the threads.
11. Remove the wheel from the car and change it over with the spare.
12. Replace the wheel bolts and tighten by hand. Then, with the wheel wrench, lightly tighten in a crisscross sequence.

13. Lower the car completely and remove the jack.
14. Fully tighten the wheel bolts with the wheel wrench in a crisscross sequence, as shown.
15. Press on the wheel/wheel bolt trim. Wheel covers have a valve symbol on the rear of the cover, which should point towards the valve.

    Note that on light alloy wheels you should insert the pin on the back of the hub cap into the corresponding hole in the wheel.
16. Models with jacking point covers: refit cover to body by hand.
17. Stow away wheel, tools, and jack.
18. Have the flat tyre repaired as soon as possible.

CAUTION:

As soon as possible after changing a wheel, you should have the wheel bolts tightened with a torque wrench to 110 Nm and have the new wheel balanced on the car.

Wheel bolts should be tightened evenly to the correct torque in a crisscross pattern. Improperly tightened wheel bolts could eventually allow the wheel to come off while the car is moving!

ENGINE OVERHEATING

CAUTION:

Immediate action is required if the engine overheats. For physical reasons, the engine temperature gauge shows the correct temperature only if there is sufficient coolant in the cooling system. Should irregularities in the coolant temperature occur, for example if the gauge enters the red zone, check the coolant level immediately. Overheating can also be indicated by steam escaping from under the bonnet, a loss of power or a loud knocking or pinging noise.

Continued driving EVEN FOR A SHORT TIME could cause a fire, personal injury or car damage.

Pull out of the traffic as soon as possible and stop the car. Leave the engine idling and the park brake applied while you get out and check that the cooling fan is working.

CAUTION:

Do not open the bonnet if you can see or hear steam or coolant escaping from the engine compartment. Wait until no steam or coolant can be seen or heard before opening the bonnet.

If the fan is working and the temperature gauge needle has not returned to its normal position within a few minutes STOP the engine and remove the ignition key.

Look for leaks at the radiator hoses and connections, heater hoses and connections, radiator and water pump.

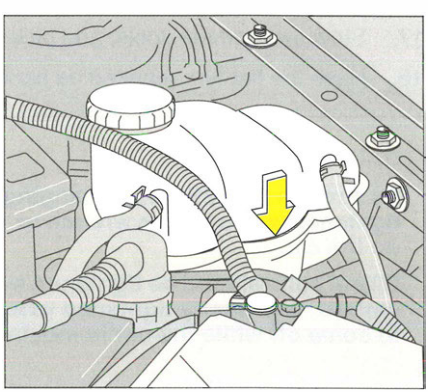
Take care when checking all these areas as they will probably still be hot.

IF YOU FIND A MAJOR LEAK OR FIND OTHER PROBLEMS THAT MAY HAVE CAUSED THE ENGINE TO OVERHEAT, DO NOT RUN THE ENGINE UNTIL THESE PROBLEMS HAVE BEEN CORRECTED.

If you do not find anything wrong then you should check the engine coolant level in the surge tank.

When the engine is hot the level should be above the "KALT/COLD" (cold) mark.

If the level is below the "KALT/COLD" (cold) mark fluid should be added.



CAUTION:

Do not remove the cooling system cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.

ENGINE OVERHEATING

When the engine has cooled sufficiently, remove the surge tank cap as follows:

Cover the surge tank cap with a thick cloth, slowly turn anticlockwise and remove.

Top up the surge tank with clean water to the "KALT" (cold) mark WHEN THE ENGINE IS IDLING.

Replace the cap and leave the engine idling for a few minutes.

If, after taking one or more of the above actions, and once the temperature gauge no longer signals an overheat condition you can resume driving at a reduced speed. Return to normal driving after ten minutes if the temperature gauge does not again show an overheat condition.

If overheating occurs again you should have the car attended to, as soon as possible, by a qualified mechanic.

Note that with this type of sealed, pressurised cooling system there should be very little loss of coolant. If the surge tank is low a leak is indicated. Therefore you should see your Holden Dealer as soon as possible to fix the leak.

The engine may temporarily operate at high temperatures during more demanding operating conditions, especially on very hot days. These conditions include:

- climbing a long hill
- stopping immediately after high speed driving
- idling for long periods in traffic
- towing a heavily laden trailer or caravan.

You should avoid operating your car for prolonged periods in any of the above circumstances if the temperature gauge indicates high engine coolant temperature.

Refer Chapter 7, which gives maintenance instructions to help protect your cooling system from overheating.

FLAT BATTERY

CAUTION:

DO NOT attempt to "push start" or "tow start" this car, as it is fitted with a catalytic converter and if un-combusted fuel were to reach the catalytic converter and ignite, the converter could overheat or be destroyed by backfire.

If your car will not start due to a discharged battery, it can often be started by using energy from a battery in another car - a procedure called "jump starting".

However, if after reading the following procedure you are still unsure about "jump starting" we strongly recommend for your safety and that of your car that you leave the starting to a competent mechanic.

Jump starting

CAUTION:

Batteries produce explosive gases, contain corrosive acids and supply levels of electrical current high enough to cause burns. Therefore, to lessen the chance of personal injury when working near a battery:

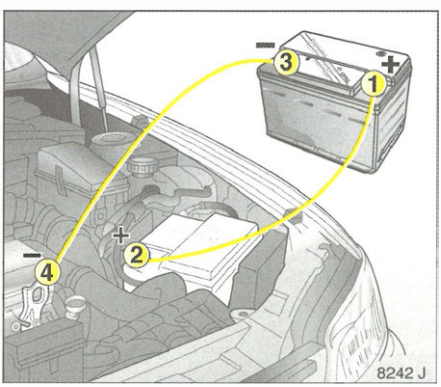
- **Do not expose the battery to open flames or sparks. Battery action generates hydrogen gas which is flammable and explosive.**
- **Do not smoke near a battery.**
- **Wear eye protection such as industrial safety glasses and avoid leaning over the battery whenever possible.**
- **Do not allow battery acid to contact eyes or skin. Flush any contacted area with water immediately. In case of eye contact you should get medical help. Battery acid will also damage paint and fabrics if not washed off immediately.**
- **Be sure any batteries that have filler caps are properly filled with fluid.**
- **Remove rings, metal watch bands and other metal jewellery before working around the battery.**
- **Carefully follow each step in the jump starting procedures.**
- **Never use a quick charger to start your engine.**
- **Do not lean over the battery during jump starting.**

FLAT BATTERY

- The battery of your car has a negative earth and a 12 volt rating. The battery in the other car (that is being used to jump start the flat battery) must be the same voltage and also have a negative earth. The battery capacity of the charged battery must not be substantially lower than that of the discharged battery. So, check the specifications in the other car's owner manual to see if it complies. Serious injury or damage may result if the wrong type of battery is used.
- Position the two cars so that they are NOT touching and apply the park brakes. Automatic transmissions are to be placed in PARK and manual transmissions placed in NEUTRAL. Turn off ignition, all lights and accessories in both cars, except the hazard warning flasher or any lights needed for the work area.

Connect the jumper cables in the order shown in the picture

1. Attach one end of the first jumper cable to the positive terminal of the charged battery (identified by "+" or "P" on the battery case, post or clamp).
2. Connect the other end of the same cable to the positive terminal of the discharged battery.
3. Attach one end of the second jumper cable to the negative terminal (identified by "-" or "N" on the battery case, post or clamp) of the charged battery.
4. Connect the other end to a solid stationary, metallic point on car's engine with the discharged battery, e.g. engine block or screw connection in engine suspension. DO NOT CONNECT DIRECTLY TO NEGATIVE POST OF DISCHARGED BATTERY! The connection should be as far away from the discharged battery as possible.



- When making all connections take care that the clamps from one cable do not inadvertently touch the clamps on the other cable. Also, ensure that jumper cables are not on or near pulleys, fans or other points that will move when the engine is started.
- Start the engine in the car with the charged battery and run the engine at a moderate speed. Then start the engine in the car with the discharged battery. Attempts to start the engine with the discharged battery should be made at intervals of one minute and should not last longer than 15 seconds.
- After starting, allow both engines to idle for approx. 3 minutes with the leads still connected.
- Leave the engine running as you remove the jumper cables by reversing the above sequence exactly. While removing each clamp, take care that it does not touch any other metal while the other end remains attached.

AIR BAGS

The airbag system is identified by the word "Airbag" on the steering wheel. If a passenger airbag is fitted, the word "Airbag" will also be above the glovebox.

If your car is fitted with driver and passenger air bags they will operate as a pair - they are triggered simultaneously.

If your car is involved in a severe front end collision, the air bags will inflate, assisting the seat belts to restrain forward body movement.

An operating noise may be heard and a small amount of smoke-like gas will be released. The gas is harmless and does not indicate malfunction or fire.

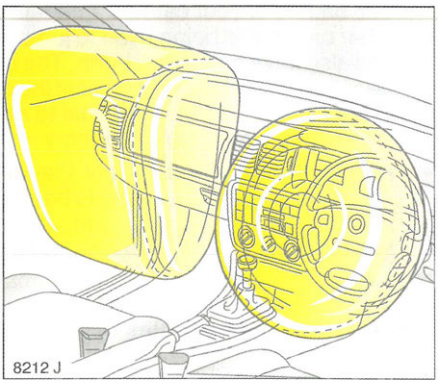
The air bags will then deflate - the whole process *only taking a moment.*

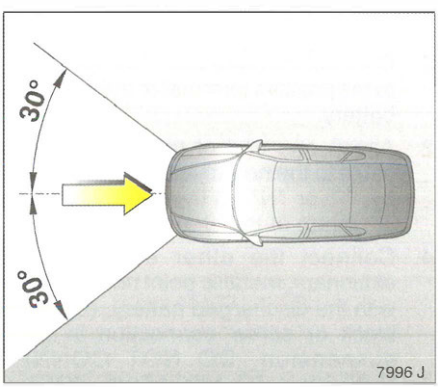
The air bags assist, but do not replace the seat belts. The air bags are not designed to inflate if the car is hit from the rear or side or the car overturns. *Seat belts (by law) should be worn by all passengers whenever the car is moving.*

Air bags inflate with great force. If you are too close to an inflating air bag it could seriously injure you. Seat belts help keep you in position for air bag inflation in a crash.

The air bags inflate with extreme rapidity. It is therefore important that seats are correctly adjusted. Adjust the driver's seat to suit the driver's height so that the driver is sitting upright with slightly bent arms when holding the upper spokes area of the steering wheel. The passenger seat should be as far back as possible, with the back rest upright.

The "AIR BAG" light on the instrument panel will glow for a few seconds when the ignition is switched ON. This is to indicate that the air bags are operational. If the light *does not* show when the ignition is switched to ON, or if it comes on when driving, you should contact your Holden Dealer.





Air bags will inflate if the car is struck hard within the non-shaded section. Air bags will not inflate if the car is struck from the side, rear, or in some rollovers....always wear a seat belt.

AIR BAGS

After use the whole air bag system will have to be replaced by your Holden Dealer.

The system should also be inspected by a Holden Dealer if the steering wheel or dash board area is scratched, cracked or damaged. Remember that the horn pad must not be covered with adhesive or any other material, as this may hinder air bag operation.

As a passenger's side air bag is fitted, the dash board area must be kept clear, with nothing around this area or hanging from the sun visor.

The electronics controlling the airbag system and belt pre-tensioners are located in the centre console. To prevent malfunctions, don't place magnetic objects in the immediate vicinity of the console.

Extensive design and testing has gone into the air bag system. It is extremely reliable and has very little chance of accidental inflation. It should however, be treated with respect. Any careless or unskilled interference with the system could lead to its failure or to accidental inflation. Any work to the electrical system, steering column, dash board area, steering wheel or air bag system should *only* be carried out by an authorised Holden Dealer.

BULL BAR NOTE: Fitting a "bull bar", or making other modifications to the front of the car, may change the impact speed which would normally cause the air bag to inflate, reducing its effectiveness. Bull bars should not be fitted to cars operating in suburban areas, as they increase the risk of injury to a pedestrian in the event of a collision. Bull bars are only recommended for country/outback areas, where additional protection from straying animals is required. Please remember that defensive driving and limiting driving speed to the road conditions is always the best approach, particularly where road side signs indicate wildlife is abundant.

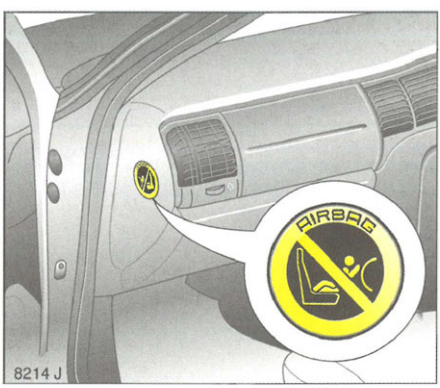
Passenger's side air bag and child restraints

CAUTION:

NEVER install a rear-facing child restraint in the front seat of car with a passenger's side air bag. The child could be seriously injured if the passenger's side air bag inflates, as the child's head would be very close to the inflating air bag.

Where legally allowable, you may install a forward-facing child restraint in the front seat, but ALWAYS move the passenger seat as far back as it will go.

It is always better to install a child restraint in the rear seat.

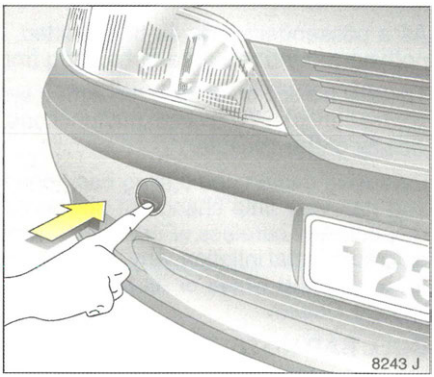


TOWING A DISABLED CAR

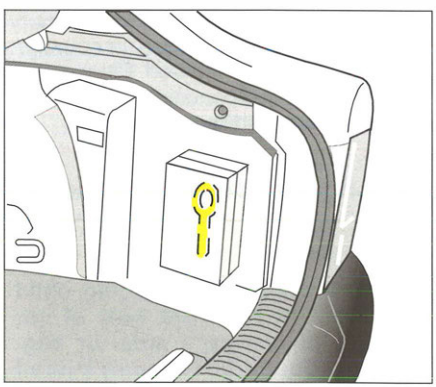
Proper lifting or towing equipment is necessary to prevent damage during any towing operation of the car. State and Local laws must be followed. In an emergency, your car may be towed on all four wheels in the following manner:

Towing the Vectra

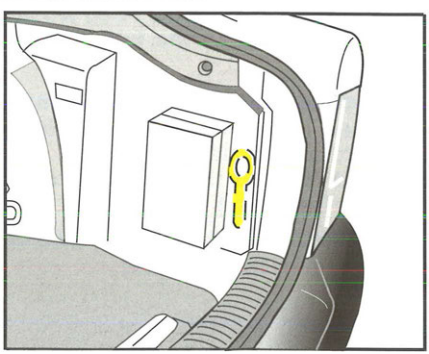
Open the cover concealing the hole for the towing eye, located at the front on the driver's side of the car.



Sedan: The towing eye is located in the luggage compartment. It is clipped behind a cover on the right hand side of the car.

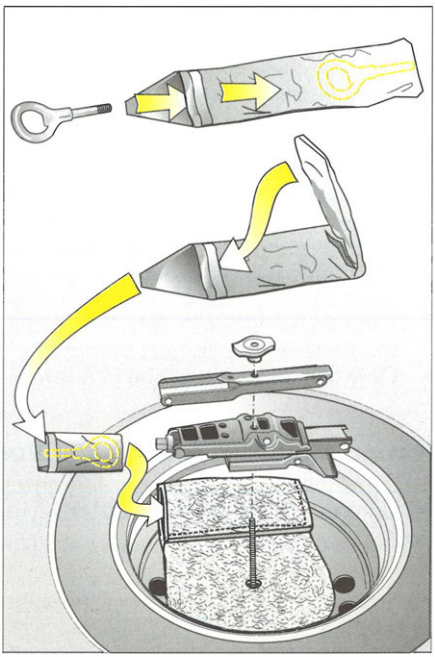


Hatch: The towing eye is located behind a panel on the right hand side of the luggage compartment area.

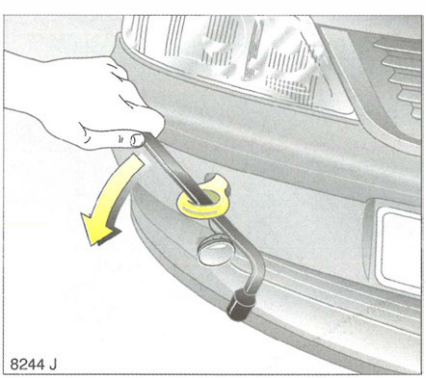


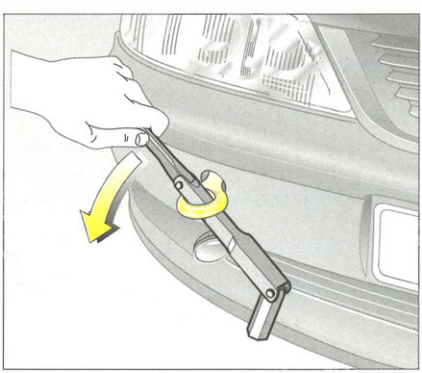
TOWING A DISABLED CAR cont.

Wagon: The towing eye is located in the tool bag stored inside the spare wheel (note that a screwdriver is also stored in this bag).



All models: Screw in the towing eye anti-clockwise as far as it will go. Use the jack handle to tighten until it is horizontal.



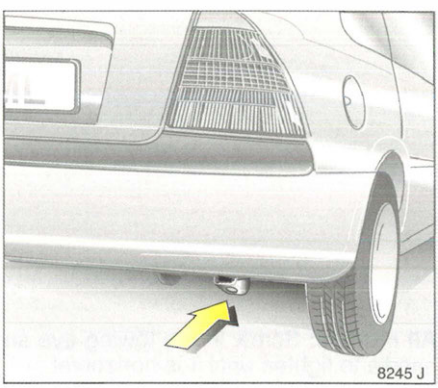


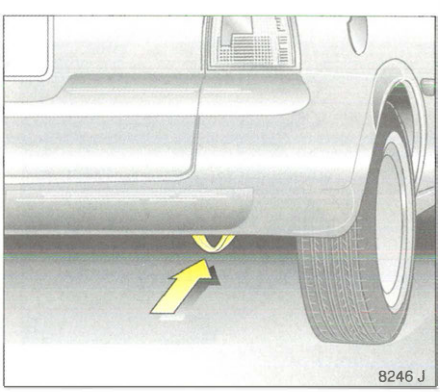
TOWING A DISABLED CAR cont.

- Attach a tow rope to the eye. Do not attach to the bumpers or brackets.
- Place transmission in neutral/"N" position and release the park brake.
- Switch the ignition to position II (on). This will free the steering lock and allow the correct operation of windscreen wipers, horn and turn signals.
- For the sake of safety and to prevent damage to the car it is advisable to avoid jerky movements and to drive slowly during towing operations.
- Remember that power assist for brakes and power steering will not be available when the engine is off. Therefore, more effort will be required to brake and steer.
- To prevent the entry of exhaust fumes from the towing car into the passenger compartment of your car, close the windows and stop entry of air by moving heating and ventilation controls to “re-circulate” position.
- Cars fitted with automatic transmissions should only be towed facing forwards and must not be towed for further than 100 km or faster than 80 km/h.
- If the transmission is defective, or if the above speed or distance is to be exceeded, the front of the car must be raised.
- Only the driver should be in a towed car.

Towing another car from your Vectra

Attach a tow rope to the rear towing eye, never to the rear axle. Drive off slowly and avoid jerky movements.





MOVING A DISABLED VECTRA

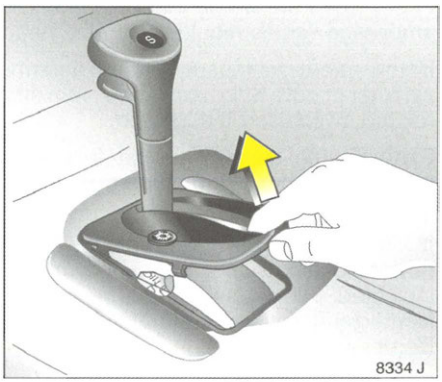
Automatic transmission only

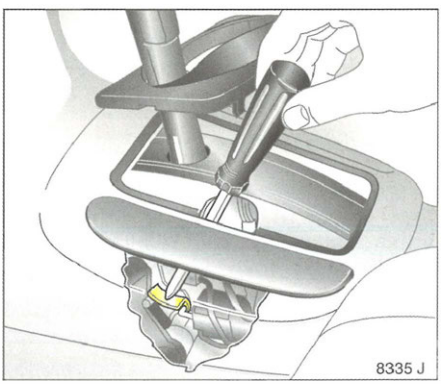
For safety, the transmission has an electric PARK lock so that the key must be in the ignition (in the ON position) before the T-bar can be moved away from the "P" position. If the car's battery is flat the T-bar cannot be moved, as required for towing.

Therefore, to move the T-bar:

1. Apply the park brake.
2. Lift up the cover from the centre console, turn 90 degrees clockwise and lift up out of the way.
3. Push catch forward using a screwdriver and move the T-bar out of the "P" position.
4. Replace the cover of the centre console and push back into place.

Moving back to the "P" position again will re-lock the lever.





FUSES

The fuses are located under a cover inside the car next to the steering column. Pull the cover up from the bottom.

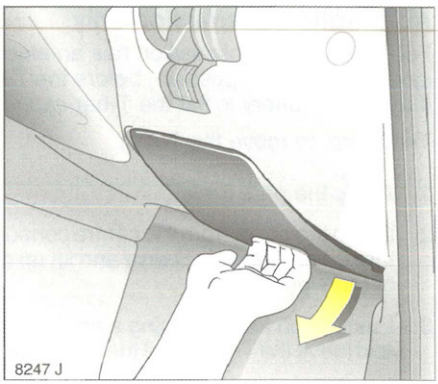
Fuse symbols are shown on the inside of the cover.

Fuses used are of the blade type with the amperage values moulded into the head.

Before removing a suspect fuse to determine whether or not a fuse has 'blown', turn off the related switch and the ignition.

Examine the element in the fuse. If the element has broken, replace the fuse with one of the same value.

If after replacing a burnt-out fuse and the new fuse also burns out, an overload is indicated. The cause of the fault should be located and rectified, preferably by a Holden Dealer.

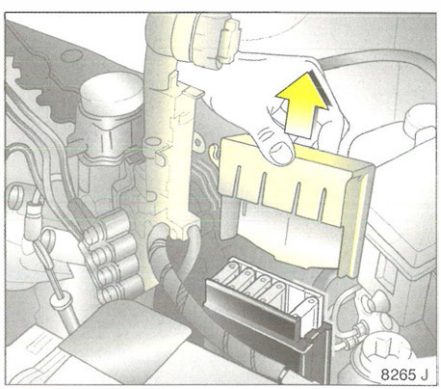


CAUTION:

When replacing a fuse be sure to use a fuse of the specified amperage. Never install a wire or similar device to replace a fuse, as it could damage electrical components and may cause a fire hazard to your car.

The electrical system is protected by additional fuses and relays located in separate fuse boxes in the engine bay.

If there is a fault in one of these fuses please consult a Holden Dealer.



BULB REPLACEMENT

When replacing a bulb, turn off the related switch.

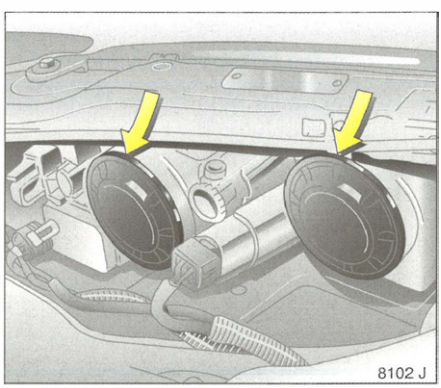
Do not touch new bulbs with bare hands. Greasy fingers will cause stains, which evaporate, and result in a dull light. Grease spots on Halogen bulbs will, within a short time lead to bulb failures. Inadvertently stained bulbs may be cleaned with tissue paper, or a clean, non-fuzzy cloth, using alcohol or white spirits.

When replacing bulbs do not exceed the wattage given on the base of the defective bulb.

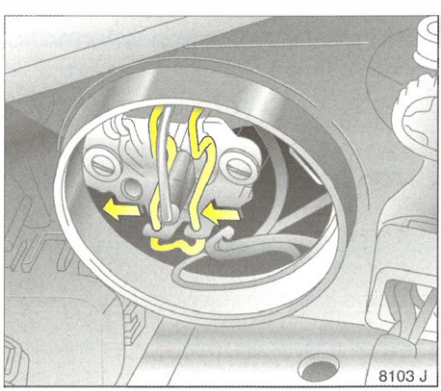
Detailed procedures for headlight aiming are given in the relevant service manual for your car. However, because headlight aiming is a safety item it is recommended that you have it carried out by your Holden Dealer.

Headlights

Separate bulbs are used for low and high beam. The outer bulb is for low beam, the inner bulb is for high beam.

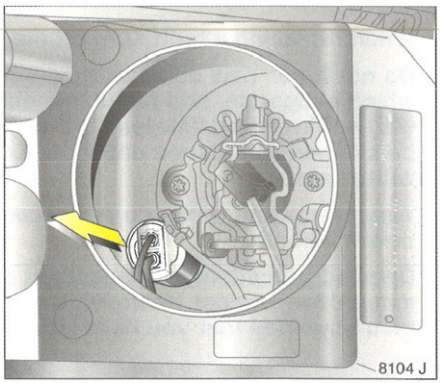


1. Open the bonnet.
2. Remove headlight protective cover.
3. Detach plug connector from bulb base.



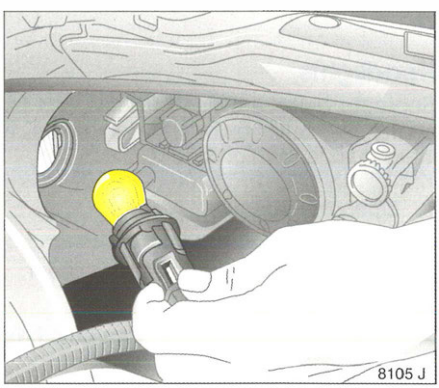
4. Press bulb retaining clip to the side and swivel out.
5. Remove bulb from reflector housing.
6. Insert new bulb so that lug on bulb holder engages in recess in reflector.
7. Swivel retaining clip and engage. Attach connector to bulb, place headlight protective cover in position and close cover.

Parking light



1. Remove main-beam protective cover.
2. Remove holder for parking light bulb from reflector.
3. Remove bulb from holder.
4. Insert new bulb so that the two lugs on the bulb base engage in the recesses in the holder.
5. Insert holder in reflector. Place main-beam protective cover in position and close cover.

Front turn signal light



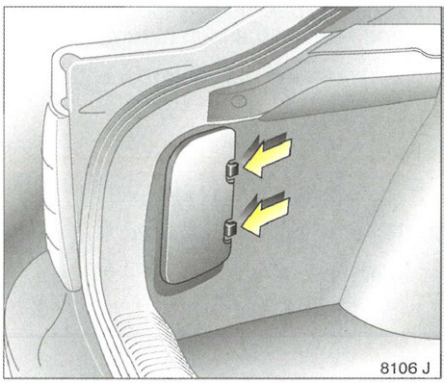
1. Disengage bulb holder by turning.
2. Remove bulb from holder by pressing slightly and turning.
3. Insert new bulb and engage holder in reflector by turning.

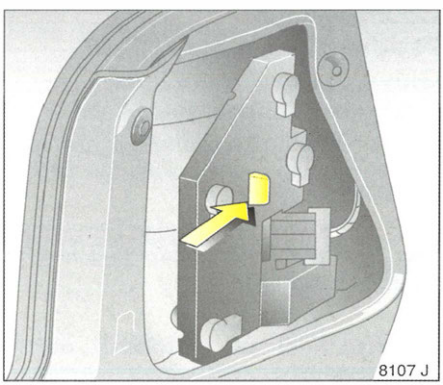
Instrument illumination, Information display illumination (if fitted) and fog lights (if fitted)

Have bulbs replaced by a Holden Dealer .

Brake, turn signal, reverse and tail light, rear fog tail light (if fitted)
Sedan and Hatch:

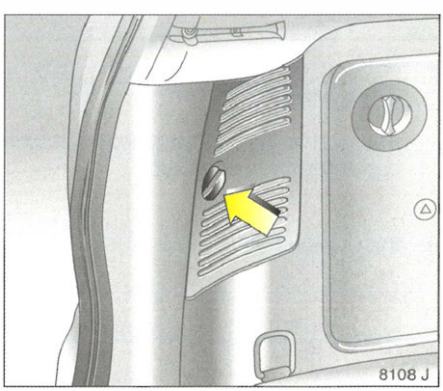
1. Remove cover.
2. Press the retaining lug in the middle of the bulb mounting to the side and remove the bulb mounting. Bulb sequence:
   Top: Brake
   Centre, outside: Turn signal
   Centre, inside: Reverse
   Bottom, outside: Tail
   Bottom, inside: Fog tail light/reverse
3. Remove bulb from holder.
4. Insert new bulb and engage bulb mounting. Replace and close the cover.





Brake, turn signal, reverse and tail light, rear fog tail light (if fitted)
Wagon:

1. Turn the fasteners and remove the cover.

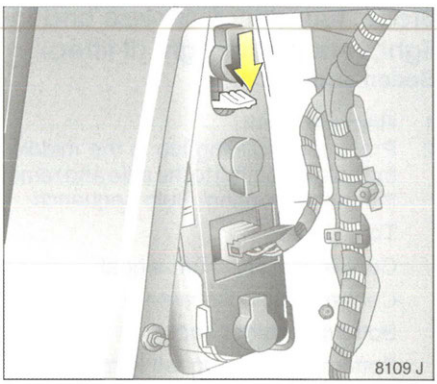


2. Press the retaining lug shown downwards and remove the bulb mounting.

   Bulb sequence from top to bottom:

   Brake light
   Turn signal light
   Reverse light
   Tail light/for rail light

3. Remove bulb from holder.
4. Insert new bulb.



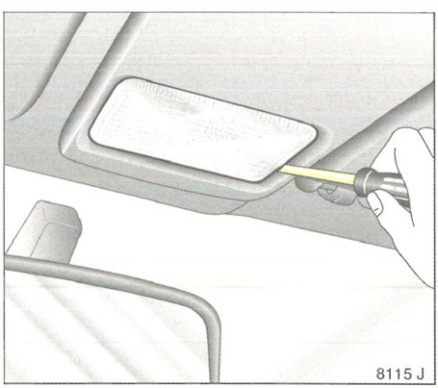
Courtesy light
Reading light, rear (if fitted)
Glove compartment light
Luggage compartment light

Before removing the courtesy light or one of the rear reading lights, close the doors so that the light is not live.

Before removing the luggage compartment light, hold down the contact switch so that the light is not live.

1. Prise light out of recess, using a screwdriver.

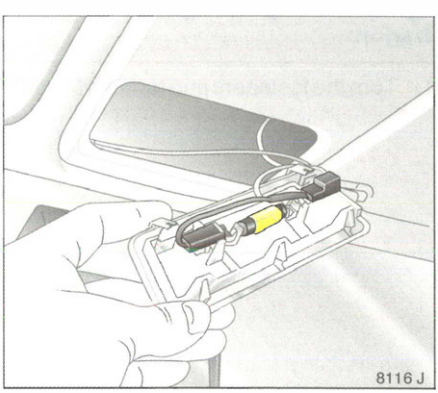
   For courtesy light with reading light (if fitted), lever lens out of housing.



2. Press bulb slightly towards spring clip and remove.

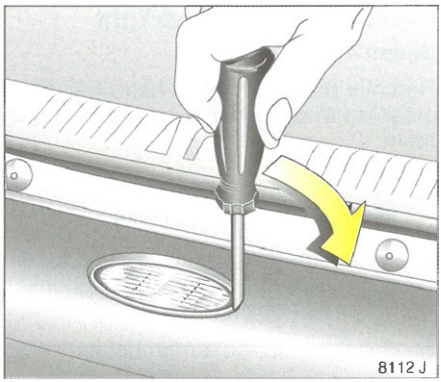
   For reading light, pull out holder at switch button and remove bulb.

3. Insert new bulb.

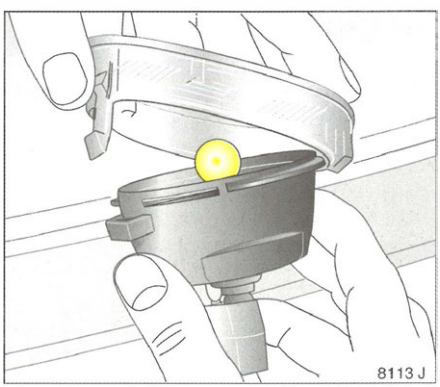


Number plate light
Sedan and hatch

1. Open the boot/tailgate.
2. Insert screwdriver vertically on right-hand side of light insert, exert pressure towards the right and disengage spring. Raise light insert on right and lift out.

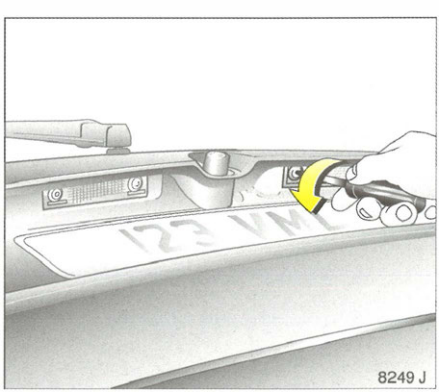


3. Depress protruding tongue and open light housing.
4. Remove bulb from holder.
5. Insert the new bulb.



Number plate light
Wagon

1. Open the tailgate.
2. Unscrew the two screws on the underside of the tailgate handle and remove the lens.
3. Press the bulb in slightly towards the spring clip and remove.
4. Insert the new bulb.

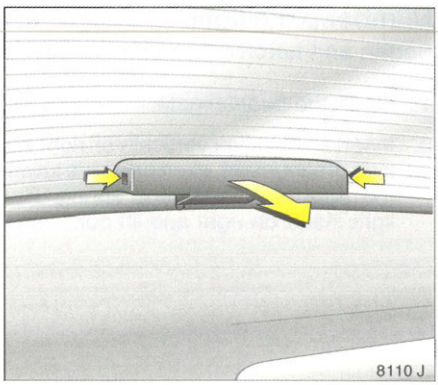


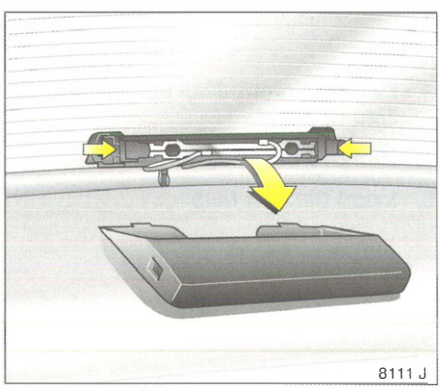
Centre mounted stop light

Sedan and hatch

Remove the rear centre head restraint by pressing in the locking springs to release them.

1. Remove the stop light cover by pressing the release buttons at either side.
2. Press the side retaining lugs together and remove the bulb mounting forwards out of its housing.
3. Pull the bulb out of the holder.
4. Insert new bulb.





Centre mounted stop light

Wagon

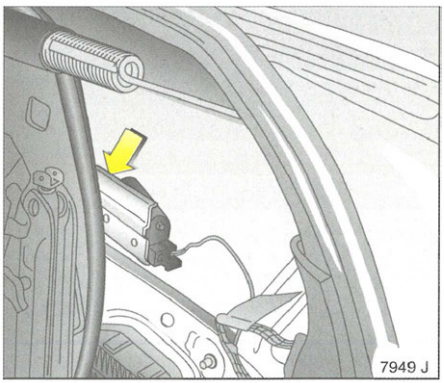
Have the bulbs replaced by your Holden Dealer.

FUEL FILLER

The fuel filler is incorporated with the central locking of the doors. When the doors are locked the fuel filler is locked; when the doors are open the fuel filler is open.

However, if the central locking system has become inoperative for some reason and the fuel filler has to be opened, the following method should be followed:

- Unlock and open the boot/tailgate.
- Open the cover on the right-hand side of the luggage area.
- The release rod for the fuel filler is located behind the servo-motor (arrow in illustration).
- Push the rod back by hand.
- The fuel filler can now be opened.



CHAPTER 7

Weekly checks

Page

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7-2 Service manuals
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MISCELLANEOUS CHECKS

As well as taking your car to be serviced (refer Chapter 12) there are a few simple, weekly checks that the owner (or Nominee) is required to make. These are shown on the following pages.

The following checks should also be regularly done to ensure proper safety and dependability of your car.

CAUTION:

The engine cooling fan can start working unexpectedly, even when the engine is not running. To avoid injury from the fan, make sure the ignition key is switched OFF, so that the fan cannot start operating.

CAUTION:

Electronic ignition systems have a high ignition power. Do not touch the ignition system; this could be highly dangerous.

CHECK:

- that all exterior lights are working and that their appropriate interior indicators light up when in operation.
- mirrors and glass are clean and not scratched.
- automatic transmission T-bar indicator correctly lines up next to the gear selected.
- the aim of water on the windscreen or tailgate and condition of the wipers.
- demister operates.
- condition and operation of all seat belts (give it a sharp tug to make sure that it will 'lock' if necessary) and check that buckles are clean and operating correctly. Remember that seat belts must never be worn twisted.

Service manuals

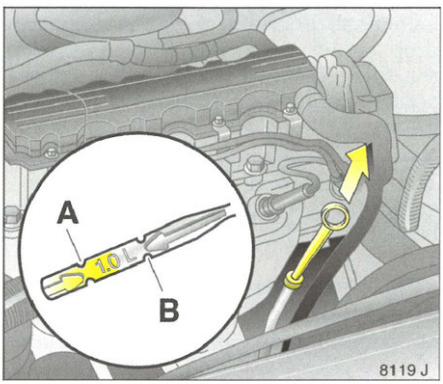
Holden also publishes various service manuals, which are available from your Dealer.

ENGINE OIL LEVEL

It is normal for every engine to consume some oil. For this reason the engine oil level should be checked every 500 km or before starting a long trip.

The oil level must be checked with the car parked on level ground and with the engine (which must be at normal operating temperature) switched off. Wait at least two minutes before checking the level to allow the oil to settle. If the engine is cold the oil may take considerably longer to drain back.

To check the level, remove the oil dipstick, wipe it clean and re-insert it as far as it will go. Pause for a second then withdraw the dipstick and look at the oil level on it.

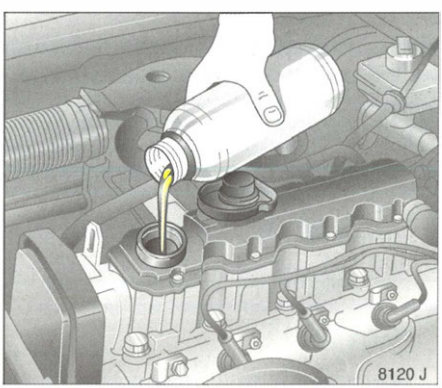


The oil level should be maintained between the two marks (**A** and **B**).

If you need to add oil, use SG grade engine oil 20W/50 (or 15W/40 for prolonged use in snow areas).

To add oil, undo the cap on top of the engine. Add enough oil to bring the oil level to the *top* mark. As a guide, the distance between the marks represents 1 litre of oil.

Wait a few minutes for the oil to settle. Then check the oil level again. If still too low, add more oil. If now correct, replace the oil cap and the dipstick.



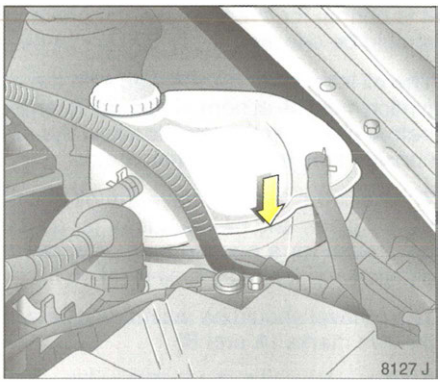
Note that the oil level should not go above the *top* mark on the dipstick.

Oil consumption should not be judged until the car has run several thousand kilometres. It may take this long for oil consumption to stabilize.

NOTE: Non-detergent and other low quality oils are specifically not recommended. The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives are not recommended. Their use will increase costs, may be detrimental to the operation of your car and may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended fluid to have affected the specifications or quality of your Holden vehicle.

ENGINE COOLANT LEVEL

The level of coolant should be checked at least weekly. This is simply a matter of looking at the level in the plastic container when the engine is cold.



The level should be slightly above the KALT/ COLD mark when the engine is cold. The level rises when the engine is running and drops again when the engine cools down. If the level falls below the 'cold' mark the coolant should be topped up to a little over the mark.

The LONG LIFE COOLANT in your car conforms to Holden specification number HN 2217.

If topping up, first mix a solution of 50% LONG LIFE COOLANT and 50% water. Failure to use the coolant meeting Holden's specification or maintaining the specified concentration may result in voiding your warranty.

In an emergency, plain water may be used temporarily in the cooling system until the correct Holden LONG LIFE COOLANT is obtained as soon as possible from the nearest Holden Dealer.

It should be noted that the specified long life coolant contains special corrosion inhibitors for the best corrosion protection of your engine and cooling system. This LONG LIFE COOLANT also gives your cooling system greater hot weather protection by increasing the boiling point and in addition provides protection in cold weather conditions down to -30°C, provided the correct concentration is maintained. It remains in the cooling system throughout the year and does not need to be changed.

If you regularly have to top up the cooling system, you should see your Holden Dealer.

CAUTION:

Corrosion inhibitors and antifreeze fluids are poisonous. Use extreme care when handling. If swallowed seek medical attention. Do not remove the cooling system cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.

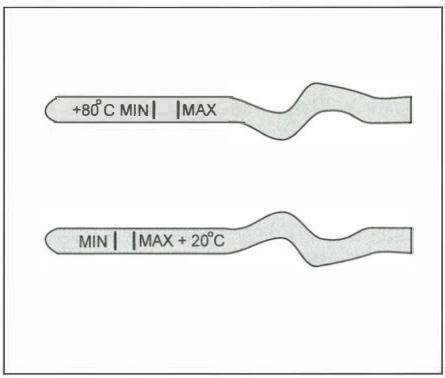
Refer Chapter 6 if engine overheats.

AUTOMATIC TRANSMISSION FLUID LEVEL

If your car has an automatic transmission the fluid level on the dipstick should be checked weekly.

Dirt in the transmission can cause breakdowns, so be careful when checking or adding fluid.

The dipstick has different markings on each side, the +20°C is used for the "cold" check; the +80°C for the "hot" check.



- Use the cold side marks when the car has not been driven for a couple of hours and the outside air temperature is below 35°C. If using the cold marks, the check must be completed before the engine has been idling for one minute.
- Use the hot side marks when the car has been driven for at least 20 km.

The car must be parked on level ground, the park brake applied and the selector in `P', and the engine idling. Remove the dipstick, wipe it clean with a clean non-fluffy cloth. Re-insert the dipstick as far as it will go and then withdraw the dipstick and look at the fluid level. The level should be between the MIN. and MAX. marks.

Cables conducting ignition voltage are located next to the dipstick. When checking the fluid level avoid touching the cables.

If a top up is required, add fluid in the same opening as the dipstick is stored in. The fluid should be automatic transmission fluid, meeting the requirements of Holden Specification number HN2258 * (Castrol Transmax M, Shell AFT DII). As an indication, the difference between the MIN and MAX marks represents 0.4 litres.

Again check the level with the dipstick and add further fluid if necessary. Remember to replace the dipstick.

If fluid has to be added often, you should see your Holden Dealer.

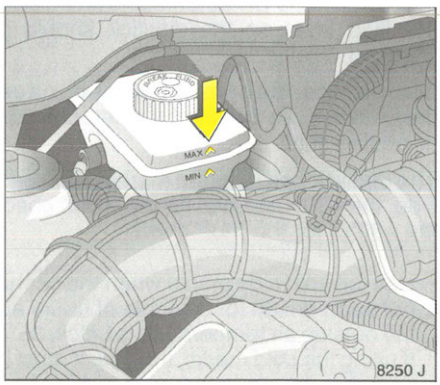
* The fluid specified above can be used for top ups of the transmission. However, if the transmission requires more than a top up, then a different fluid should be used, refer page 8-2.

BRAKE & POWER STEERING FLUID LEVEL

Brake fluid level

CAUTION:

Brake fluid is poisonous and corrosive and will damage the paint finish of your car if spilt.



The brake fluid in the master cylinder should be checked weekly. The master cylinder is located in the engine bay, on the driver's side of the car.

The fluid level, visible in the see through master cylinder, should be between the MIN and MAX level markings.

If the fluid is between these levels do not remove the master cylinder cap, as brake fluid exposed to the atmosphere will quickly absorb moisture, which in turn lowers the boiling point of the fluid as well as increasing risk of corrosion of brake components.

If fluid needs to be added, first clean around the cap. Top up with heavy duty brake fluid which meets S.A.E. Specification J1703, DOT 4. Remember to secure the cap.

Use only new brake fluid. Use of an old, used or inferior brake fluid may endanger the functioning of the brake system. Brake fluid in your car must be completely replaced every 2 years.

If the master cylinder requires constant topping up it could indicate that a malfunction exists and you should immediately see your Holden Dealer.

Power steering fluid level

The container for the power steering fluid is located in the engine bay. Check the fluid level when the engine is turned off.

Unscrew and carefully remove the cap on top of the container. The dipstick is attached to the cap.

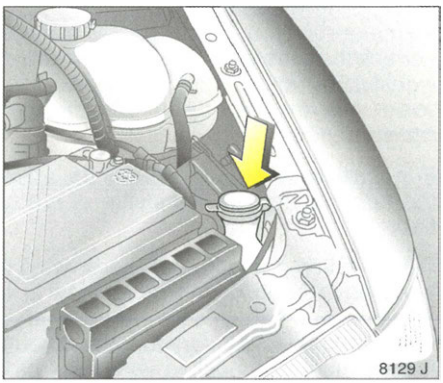
If the car has been driven for a while the fluid level should be at the upper level mark. When the fluid is cold the level should be at the lower mark (but never lower).

If fluid needs to be added, use Automatic transmission fluid 11D.

Do not overfill. Remember to replace the cap tightly. If you often need to add fluid, you should see your Holden Dealer.

WASHER FLUID LEVEL & BATTERY

Washer fluid level



As the washer fluid is constantly used the level should be checked weekly and topped up as required.

The washer container is for both the windscreen and (if fitted) tailgate washers.

The washer container is located under the bonnet, on the drivers side.

To fill, open the flip top cap.

For a crystal clear windscreen, the correct amount of Optikleen (part no 92140005) can be added. Do not use ordinary soap or detergent as these not only froth up but will also damage the wiper rubbers.

Remember to secure the cap after filling.

Battery

Sedan and wagon models:

CAUTION:

- **Batteries emit an explosive gas mixture which may be ignited. You should, therefore, keep sparks and flames away from the battery at all times. Never smoke near a battery.**
- **Batteries contain sulphuric acid. If acid contacts skin or clothing, flush immediately with a lot of water. In case of eye contact, flush with a lot of water and contact a doctor immediately.**
- **Take care with all metal objects and tools including items you may wear (e.g., jewellery, rings and metal watch bands) near battery terminals.**

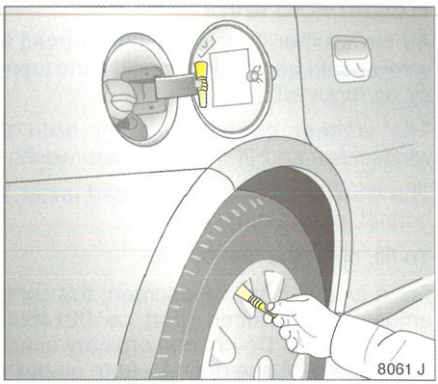
Sedan and wagon fluid check The fluid level of the battery will be checked for you when you take your car to be serviced by your Holden Dealer. If your car is operated in hot temperatures or at constant high speed the battery fluid level should be checked each month.
When checking the battery level, make sure the engine is not running. Each of the six cells must be individually checked. Use distilled water, as required, to keep the level just below the bottom of each split tube. DO NOT OVER FILL.

Hatch models:
Your car is fitted with a maintenance free battery, which means that the fluid level does not need to be checked.

All models:
Note: You should never disconnect the battery when the engine is running.
If removing the battery for recharging, first disconnect the negative cable, then the positive cable. Never charge the battery while still connected to the car. When reconnecting, first connect the positive cable to the positive post of the battery, and then the negative cable to the negative post of the battery.

TYRES

Tyre air pressure



To make sure your car will handle at its best - check the pressures (including the spare) weekly. For constant long distance or rough road travelling, daily checking is recommended.

For correct pressure for your tyres, refer to the tyre placard, on the inside of the fuel flap.

Tyre inflation pressure increases when the tyres have been driven more than 2 km. The pressure should be checked when the tyres are cold (stationary for over 3 hours). If they must be checked when warm/hot, allow pressure to read 10% above that recommended.

Always use a tyre pressure gauge to check the tyres - simply looking at the tyres is not sufficient.

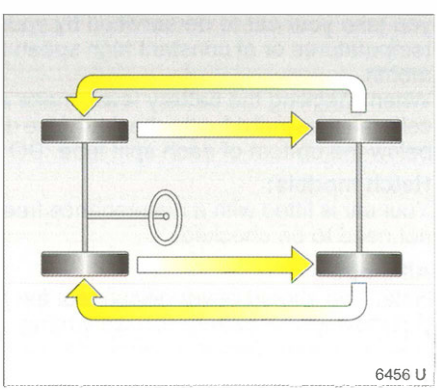
Low air pressure can result in tyre being over warm and internal damage, leading to tread separation and even to tyre blowout at high speeds.

Use the valve cap wrench to make unscrewing the valve caps easier. The wrench is located on the inside of the fuel tank filler neck cover.

Remember to put back any valve dust caps or extensions, if so equipped. This stops dirt and moisture from fouling the valves.

When checking the tyre air pressure, take a look at the condition of the tyre tread and inspect for stones or abnormal wear.

Tyre rotation



Front and rear tyres perform different jobs and can wear differently depending on the types of roads driven, your driving habits, wheel alignment and balance, tyre pressures etc.

Tyre condition will be checked for you when you take your car to be serviced by your Holden Dealer, who will be able to diagnose any unusual signs of wear. If the tyres are rotated it is recommended that the balance be checked at the same time.

Alignment and balance

Improper wheel alignment can cause the tyres to wear faster and unevenly. It can also cause the car to "pull" to the left or right.

Out-of-balance wheels and tyres can cause annoying vibration and uneven tyre wear such as cupping and flat spots.

If you have any reason to suspect that either of the above problems exists then have a wheel alignment and balance check done by your Holden Dealer.

Replacement and repair

Replacing your factory fitted wheels and tyres with non specified wheels and tyres may affect your warranty as well as your insurance policy. Refer to the tyre placard on your car for tyre size and load rating, see previous page. Using a different size or type of tyre may affect such things as ride, handling, speedometer reading, car ground clearance, tyre clearance or snow chain clearance.

Take care when using tyres with heavy treads, including tyres made for better grip in the wet. At sustained high speeds, this type of tyre will run at higher temperatures than standard tyres and consequently should only be operated within the limits recommended by the manufacturer. Any doubts about the tyres on your car should be referred to your Holden Dealer.

Tyres with a *higher* speed or load rating are acceptable, provided they are fitted to a suitable rim size.

New tyres should be fitted in pairs to the front. If replacing only one tyre, it should be paired on the same axle with the least worn of the other three.

You should replace your tyres when:

- The tyres are worn to the point where the tread indicators appear, or the cord or fabric is showing. The tyres originally fitted to your car have built-in tread indicators. When only 2 to 3 mm of tread remains, these indicators show as plain bars across the tread pattern at regular intervals around the tyre. Their position is indicated by markings on the tyre sidewall.
- The tread or sidewall is cut, split, or cracked deep enough to expose the cord or fabric.
- The tyre has a bump or bulge in it, indicating some kind of internal damage.
- The tyre has a puncture, cut or other damage which can't be repaired because of the size or location of the damage.

Do not attempt to drive on the flat tyre more than is necessary to stop safely. Driving even a short distance can damage the tyre and wheel beyond repair. Tyres which have been repaired or retreaded will not be able to be driven safely at high speeds. Therefore, their use is not recommended.

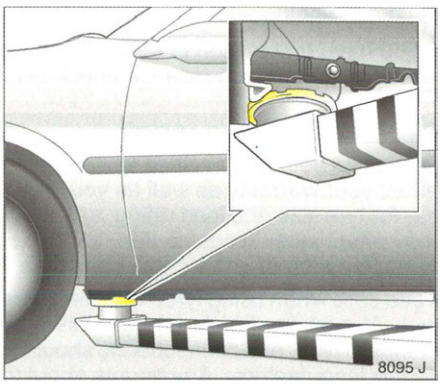
TROLLEY JACK / HOIST LOCATIONS

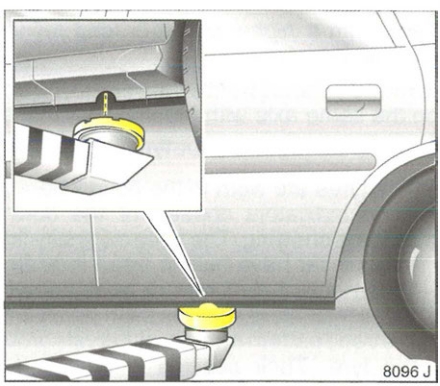
You should always use the jack locations shown in Chapter 6 when using the original jack supplied with your car, which has been designed to correctly and safely lift your car, provided the cautions in Chapter 6 are observed.

However, if using a trolley jack or hoist to raise the car, it is important that the hoist pads be positioned as shown.

The hoist pads must be placed only at the points shown, i.e. between the semi-circle jack cutouts and the wheel arch, at both front and rear.

When using lifting or jacking equipment with metal jaws, use a rubber pad to avoid damage to the car.





Notes

CHAPTER 8

Specifications

Page

8-2 Engine specifications
8-3 Transmission specifications
8-3 Dimensions
8-3 Battery
8-4 Identifications plates

SPECIFICATIONS

Engine type	2 litre: 16 valve, L4 double overhead cam	2.2 litre: 16 valve,	2.5 litre: 24 valve, V6, double overhead cam
No of cylinders	4	4	6
Piston displacement	1998cc	2198	2498cc
Power pm	100 @ 5,600	104 @ 5,200	125 @ 5,800
Torque Nm @ rpm	185 @ 4,000	200 @ 4,000	230 @ 3,200
Oil specification	Service classification SG or SH. Viscosity grade 20W/50 for normal use, Holden's Motor Oil part no. M40106 (5 litres) is recommended. For prolonged use in snow areas, the use of 15W/40 is recommended.		
Refill oil capacity (including filter)	5.25 litres	4.4 litres	4.5 litres
Fuel tank capacity	60 litres		
Coolant capacity	7.2 lts (manual trans) 7.1 lts (auto trans)	7.4 litres	7.7 litres
Coolant spec.	50% water and 50% long life coolant conforming to Holden's specification number HN 2217		

GENERAL SPECIFICATIONS

Transmission

	5 speed manual	4 speed automatic
Fluid when topping up	Use manual transmission fluid meeting Holden specification number HN2276 (Castrol MTF 1067 or equivalent).	Auto trans fluid meeting Holden specification number HN2258 (Castrol Transmax M, Shell ATF DII) or Auto trans fluid meeting Holden specification no. HN2287 (Esso JWS 3305G).
Fluid for drain and refill	as above	Auto trans fluid meeting Holden specification no. HN2287 (Esso JWS 3305G)
Capacity	1.8 litres	4 litres approx. (service fill)

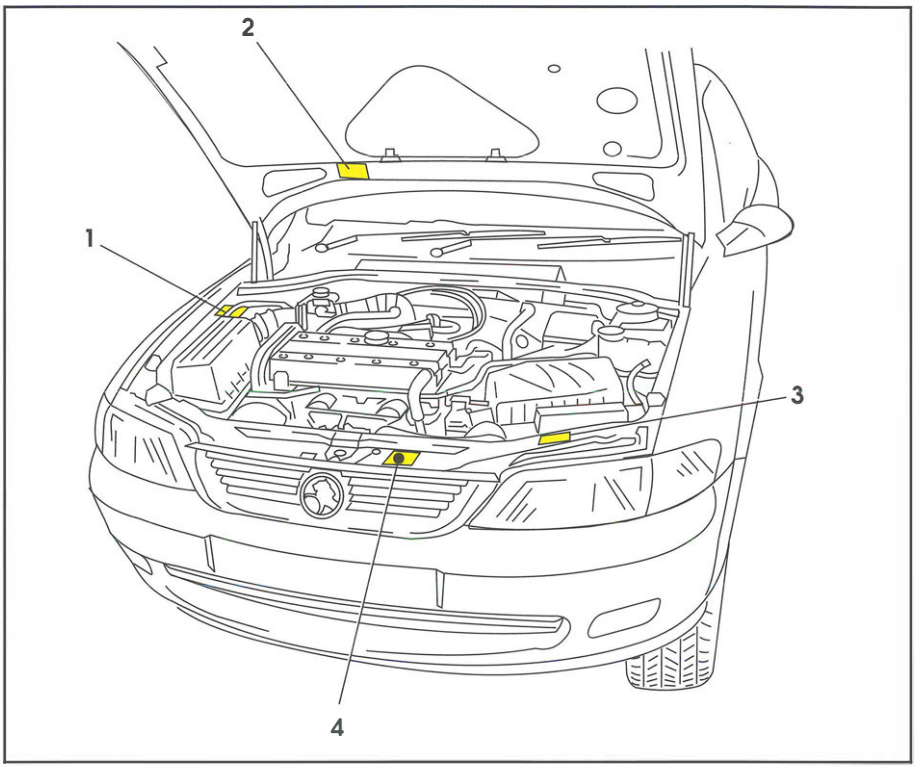
Dimensions (mm)

	SEDAN	HATCH	WAGON
Overall length	4477	4477	4490
Overall height	1425	1425	1490
Overall width	1841	1841	1841
Wheelbase	2637	2637	2637
Front track	1464	1464	1464
Rear track	1467	1467	1463
Ground clearance (at exhaust)	113	111	124

Battery

	2.0 litre engine	2.2 litre engine	2.5 litre engine
Volts	12	12	12
Amp. hours	66	50	66

IDENTIFICATION LABELS



1 Compliance plate

The plate shows the vehicle approval number, category code, make, model and seating capacity. Also shown on this plate is the ISOVIN number, which should be used for identification with spare parts. Refer last page of this chapter for breakdown of ISOVIN number.

2 Emission label

This label shows the relevant tune-up information required to maintain minimum exhaust emissions.

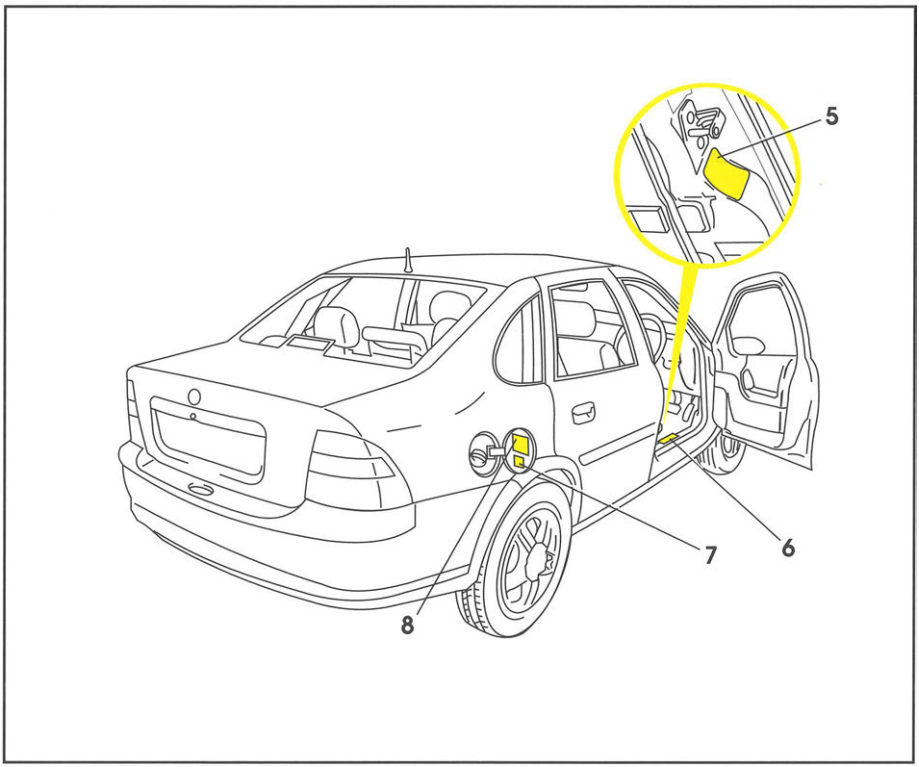
3 Holden Identification plate

The Holden number is used for warranty identification and Roadside assist identification.

4 Option code plate (if fitted)

The plate shows the option codes applicable to your vehicle.

IDENTIFICATION LABELS cont.



5 Vehicle Identification number label (hatch models only)

This label shows the ISOVIN number, which should be used for identification with spare parts. Refer following page for breakdown of ISOVIN number.

6 Vehicle Identification number stamp

This stamp shows the ISOVIN number, which should be used for identification with spare parts. Refer following page for breakdown of ISOVIN number. The number is stamped onto the sill inner panel, under a cover.

7 Fuel label

Refer Chapter 5 for type of UNLEADED fuel recommended for use.

8 Tyre placard

The TYRE PLACARD shows the recommended tyre pressures. Refer Chapter 7 for information about tyre pressures.

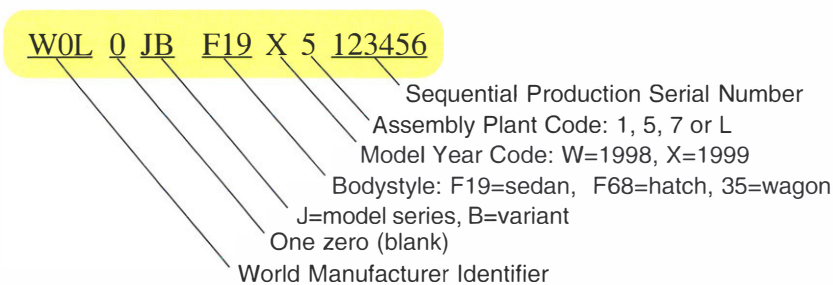
IDENTIFICATION LABELS cont.

Vehicle identification number (I.S.O.V.I.N.)

The individual I.S.O.V.I.N. Number (example below) appears on the Safety Compliance Plate. This number is used for identification of parts. This identification number appears on:

- the Compliance plate (no. 1 shown on the previous pages)
- the Option Code plate (no. 4 shown on the previous pages)
- the Vehicle Identification number stamp (no. 5 shown on the previous pages)
- the Vehicle Identification number label (no. 6 shown the previous pages)

Example I.S.O.V.I.N.


W0L 0 JB F19 X 5 123456
Sequential Production Serial Number
Assembly Plant Code: 1, 5, 7 or L
Model Year Code: W=1998, X=1999
Bodystyle: F19=sedan, F68=hatch, 35=wagon
J=model series, B=variant
One zero (blank)
World Manufacturer Identifier

CHAPTER 9

After Sales

Page

9-2 New Vehicle Warranty
9-4 Parts and Accessories Warranty
9-5 Warranty questions & answers
9-8 Roadside Assistance
9-10 Customer Assistance
9-11 For New Zealand Owners
9-12 Australian Holden Dealers
9-28 New Zealand Holden Dealers

Note: Dealership names and details may change after the printing of this Handbook. The list contains both Authorised Holden Dealers and Authorised Holden Service Operations.

NEW VEHICLE WARRANTY CERTIFICATE

New Vehicle Warranty application

This Warranty is given by Holden Limited. A.C.N. 006 893 232, ("Holden"). The Warranty applies to the vehicle identified on the inside front cover of your Owner's Handbook. It is provided to the original and subsequent owners/operators driving the vehicle within Australia during the Warranty Period.
This warranty is given in addition to all rights conferred by law on that person.
Owners of vehicles operated outside Australia should consult their local dealer about the warranty applicable to their vehicle.

Repairs covered

Subject to the exclusions shown below, this Warranty covers the correction, during the Warranty Period, of any vehicle defect related to materials or workmanship and advised to a Holden Dealer or Authorised Service Outlet, by repair or at Holden's option by replacement.

Warranty period

The coverage commences from the date of delivery (or in the case of a demonstrator vehicle the date when the vehicle was first placed into service by the Dealer). The coverage expires at the end of the period of 3 years after the commencement date or after the vehicle has travelled 100,000 kilometres, whichever occurs first.

No charge

Warranty work undertaken (including parts and labour) will be carried out at no cost to the vehicle owner. However, this work should not be confused with servicing specified in the Maintenance schedule in Chapter 12 of your Owner's Handbook for which a charge is payable.

Warranty exclusions

- **Damage**

  Your Warranty does not extend to following causes of damage:
  Damage caused by an accident, fire, theft or moving objects striking the vehicle.
  Damage caused by industrial fallout, chemicals or sealants.
  Damage caused by atmospheric fallout or flood, hail, salt, etc.

- **Maintenance items**

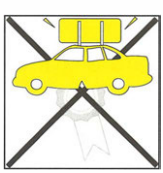
  Services such as, brake adjustment, replacement of filters, wiper rubbers etc., which are required as part of normal vehicle maintenance.

- **Tyres**

  The tyres (and tubes where applicable) fitted to your vehicle are not covered by this warranty. However, they may be covered by the tyre manufacturer.

- **Batteries**

  Batteries are warranted for 12 months from the commencement date of the warranty.



- **Misuse**

  The warranty does not cover damage caused by:

  (a) misuse or abuse of the vehicle such as by racing, rallying, overloading, etc., or neglect
  (b) operation of the vehicle after the defect is known
  (c) failure to carry out proper maintenance services
  (d) use of incorrect types and grades of fuel, oil or lubricants
  (e) alteration of the vehicle by anyone not authorised by Holden
  (f) fitting of parts or accessories not marketed by Holden
  (g) any work carried out on the vehicle by anyone except an authorised Holden Dealer or Service Dealer

PARTS AND ACCESSORIES WARRANTY

Holden warrants Holden approved Parts and Accessories ("Parts" and "Accessories") for the periods and on the conditions set out below. The Warranty covers the correction, during the relevant Warranty Period, of defects in any such Parts and Accessories, by repair or at Holden's option by replacement.

- **Accessories installed to the new vehicle**

  Holden approved Accessories installed by a Holden Dealer or authorised Service Outlet to the new vehicle at the time of purchase are covered together with the New Vehicle warranty for the period of 3 years or 100,000 km, whichever occurs first.

- **Parts and accessories installed after new vehicle delivery**

  Parts and Accessories installed by a Holden Dealer or authorised Service Outlet are covered by the unexpired portion of the New Vehicle warranty or the first of 2 years or 50,000 km. After expiry of the New Vehicle warranty, the Parts and Accessories warranty will apply until the expiration of 2 years or 50,000 kms (whichever comes first) from date of fitment.

- **Purchased at retail or trade**

  Parts and Accessories purchased at trade or retail and installed by other than a Holden Dealer or authorised Service Dealer are warranted for 1 year from the date of purchase. Please keep a receipt to support warranty claims.

- **Parts and accessories warranty exclusions**

  The tyres (and tubes where applicable) are not covered by this warranty. However, they may be covered by the tyre manufacturer.
  Batteries are warranted for 12 months from date of purchase.
  Parts which are required as part of normal vehicle maintenance are warranted against manufacturing defect at the time of installation.

WARRANTY QUESTIONS

This section is designed to assist you in understanding the Holden Warranty provided with your new vehicle.

The following are some of the most frequently asked questions, for which detailed answers have been provided.

Q 1. How do I go about obtaining Holden Warranty Service?

It is the responsibility of the Selling Dealer to provide Holden Warranty service, therefore you should take your vehicle to the Selling Dealer whenever Holden Warranty service is needed. However, if this is not possible, you may go to any other Authorised Holden Dealer. The details recorded inside the front cover of this handbook will be required by the Dealer.

Q 2. What should I do if my vehicle becomes unsafe or inoperative as a result of a defect which is covered by the Holden New Vehicle Warranty?

You should contact the nearest Authorised Holden Dealer or Holden Customer Assistance Service (refer further in this chapter) as soon as possible, and arrange for that Dealer to carry out the required Holden Warranty Service.

Q 3. What should I do if, in an emergency, Holden Warranty service is required and an Authorised Holden Dealer is not available to provide such service at the time?

If, in an emergency, a repair, replacement or adjustment (covered by the Holden New Vehicle Warranty) is required to enable your vehicle to be operated safely and it is not practical for you to go to an Authorised Holden Dealer, the service (to the extent that it is necessary to enable your vehicle to be operated safely) may be performed by any other qualified mechanic or repairer. A claim for the reasonable cost may be made through the Authorised Holden Dealer who would normally provide you with Holden Warranty Service. You must also take your vehicle to the Authorised Holden Dealer for inspection of the service and/or completion of any required Holden Warranty Service, as soon as possible.

Note: During normal business hours you should seek authorisation from your nearest Authorised Holden Dealer or Holden Customer Assistance Service, prior to repairs being commenced.

Q 4. Are damage or injury, loss of time, inconvenience, commercial or other direct or indirect loss covered by the Holden Warranty?

No, these items are not covered. Holden warranty only covers the repair, replacement or adjustment of those parts of your vehicle which are found to be defective in materials or workmanship. No other types of claim for compensation of any kind, even if the same resulted from a consequence of a defect in materials or workmanship in your vehicle, will be recognised under the Holden New Vehicle Warranty.

You may have rights under the law to claim compensation outside of the Holden New Vehicle Warranty, but any claim based on those rights should be separately pursued.

WARRANTY QUESTIONS

Q 5. Will I have to pay for maintenance costs during the Warranty Period?

Maintenance costs are not covered by the Holden New Vehicle Warranty. The Maintenance Schedules in this handbook specify the *minimum* maintenance required for your vehicle operating under normal conditions.

The Maintenance items (except where they are required as a result of defects in materials or workmanship) for which you will have to pay for include:

- Engine tune-up, including spark plugs replacement.
- Replacement of all filters, engine and other belts, hoses, wiper blades, clutch linings.
- Cleaning or flushing of fuel, coolant, brake, engine, transmission, differential, power steering etc., after 1,500 km.
- Carbon and sludge removal.
- Maintenance servicing of emission control system devices.
- Adding to (or replacing) lubricants.
- Adding to (or replacing) air conditioning refrigerant, after 1,500 km.
- Any necessary adjustments to drive belts, transmissions, clutch, park brake etc.
- Wheel balancing - after 5,000 km.
- Wheel alignment.
- De-dusting or de-glazing of brake linings or pads - after 1,500 km.
- Brake lining wear or damage.
- Brake disc pad or disc wear.
- Battery recharging.
- Paint, bright metal finish and trim, due to normal deterioration.
- Body panel adjustment - after 1,500 km.
- Door, or bonnet lock adjustments.
- Glass or channel adjustments - after 1,500 km.
- Body rattle, squeaks and general tightening of bolts, fasteners and fittings - after 1,500 km.
- Chipped glass or breakage.
- Torn or damaged floor mats or carpets.
- Normal wear and tear to trim components.

Q 6. Are my tyres covered by the Holden New Vehicle Warranty?

No. The tyres fitted to your vehicle are covered by a separate warranty provided by the tyre manufacturer. Any Authorised Holden Dealer will assist you by discussing any queries which you might have with respect to the tyre manufacturer's warranty with the tyre manufacturer's representative.

WARRANTY QUESTIONS

Q 7. Will I have to pay for any costs or expenses in connection with the provision of Holden Warranty service?

All parts and labour used in carrying out Holden Warranty Service at the premises of the Servicing Dealer are free of charge. Whenever Holden Warranty service is to be carried out by the Servicing Dealer it is your responsibility to deliver your vehicle to the Servicing Dealer's premises.

If, as a result of a defect which is covered by the Holden New Vehicle Warranty, your vehicle cannot be driven safely and you arrange for the nearest Authorised Holden Dealer to carry out the required Holden Warranty Service, Holden will accept reasonable towing costs to move your vehicle to the nearest Holden Dealer's premises. Before employing a towing company, contact the nearest Holden Dealer and/or Holden Customer Assistance Service (refer page 10 of this chapter) to obtain guidance.

Q 8. Would my vehicle's engine benefit from fuel additives, oil additives or coolant additives not marketed by Holden ?

The use of break-in oil, tune-up compounds, friction-reducing compounds and other supplemental additives is not recommended; their use will not only increase operating costs, but may also be detrimental to the operation of your vehicle.

Only the fluids and lubricants referred to in this handbook should be used.

UNAUTHORISED STATEMENTS IN RELATION TO HOLDEN PRODUCTS

No Holden Dealer or other person is authorised or permitted to give or make any statement assertion or undertaking in relation to the quality, performance, characteristics, descriptions or fitness for any purpose of any Holden product or in connection with the supply of any Holden product, which is at variance with any written statement assertion or undertaking on any of these subjects given or made by Holden in its published sales literature, and the Company does not accept any such unauthorised action.

ROADSIDE ASSISTANCE

3 YEAR
24 HOUR ROADSIDE ASSISTANCE

Our commitment to your satisfaction

Holden's Roadside Assistance is part of the unequalled commitment by Holden to provide total motoring satisfaction.

From the moment delivery is made, our aim is to provide the finest possible ownership experience, from design through manufacturing to servicing and now beyond to the open road, Australia wide.

We hope the need never arises, but if it does, we'll be there to help through Holden Roadside Assistance.

How does Holden Roadside Assistance work?

Holden Roadside Assistance is provided by Holden Limited., and delivered by the collective resources of the Australian Automobile Clubs and Associations (the constituents of Assist Australia) the AA.

Which vehicles are covered by the service?

As of 1st November 1993 all new Holden passenger and light commercial vehicles are covered for 36 months.

Holden Roadside Assistance is extended to private and business vehicles, taxis, rental companies, all government and fleet operators.

What will Holden Roadside Assistance do for me?

Holden Roadside Assistance is designed to get you mobile on any road that is trafficable to normal two wheel drive vehicles. In the event of the unexpected happening, from your keys being locked in your car to mechanical and accident advice, help is readily available by simply calling the toll free number 1800 817 100.

All Holden luxury vehicles receive the added benefits of Holden Roadside **Ultra** Assist which includes accommodation, alternative transport, rental car, assistance in case of accident, theft and medical emergency and Australia wide vehicle recovery.

Can I upgrade to Roadside Ultra assist?

Yes, owners can upgrade to Holden Roadside **Ultra** Assistance for a fee by dialling 1800 645 668.

ROADSIDE ASSISTANCE cont.

When do the benefits begin?

Cover begins from the date of first registration. An interim card entitles you to immediately receive all the benefits of Holden Roadside Assistance.

Where can I get Roadside Assistance?

Holden Roadside Assistance is available to you at home, or at the roadside, anywhere in Australia, should you need it.

Is there a membership or joining fee?

No, Holden Roadside Assistance is complimentary with every new Holden passenger vehicle and light commercial vehicle for 36 months from the date of first registration.

What will Holden Roadside Assistance cost me?

Materials, fuel and spare parts must be paid for at the time of service. The service personnel attending will issue a receipt for these expenses. Reimbursement of expenses covered by Holden's warranty can be claimed by contacting the local dealer.

What happens if I sell my vehicle?

Holden Roadside Assistance stays with the vehicle, so if you sell your vehicle during the 36 month period, it is still eligible for the service. The new owner simply registers for the service by using the change of ownership form supplied in the Roadside Assistance booklet.

How do I call for assistance?

Simply call Holden Roadside Assistance toll free on 1800 817 100 from anywhere in Australia. For further information regarding the service and full terms and conditions, refer to the Roadside Assistance Kit in the glovebox or call the toll free Customer Assistance Service Line on 1800 033 349.

CUSTOMER ASSISTANCE

We want you to be happy with your new vehicle, together with the people you deal with while you have the vehicle.

Normally, any problems with the sales, operation or servicing of your vehicle will be handled by your Dealer's Sales and Service Department.

We realize however, that, with the best intentions, misunderstandings do occur sometimes.

Therefore, we suggest you discuss any concern with one of the Dealer's management people. If you haven't received satisfaction from the Sales Manager or Service Manager - go to the General Manager or to the Dealer himself.

By now you should have satisfaction. If not, the Holden Customer Assistance office is at your disposal.

The Holden Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call. The Melbourne area number is **9646 5466**. Outside the Melbourne Metropolitan area, the number is **1800 03 3349**.

If your concern relates to parts/accessories and you have made contact with the Dealer or Distributor without satisfaction, you may contact Holden Service Parts Operations on (03) 9797 7341

Naturally, telephoning is the quickest and the best way to contact. However, if you prefer to write the address is:

The Manager
Holden Customer Assistance Services
GPO Box 343C
Melbourne, 3001.

Your letter should clearly outline your concern or query, and include the following:

- Your name and address
- Telephone numbers, both private & business
- Servicing Dealership's name and address
- Vehicle model
- Vehicle identification number (I.S.O.V.I.N.), refer to the inside front cover of this Handbook.
- Date of purchase
- Current odometer reading

Most of this information will be found on the Vehicle Identification Certificate, located inside the front cover of this handbook.

Before you write however, remember that the telephone is the quicker and more efficient means of communication.

FOR NEW ZEALAND HOLDEN OWNERS

The information in this Owner's Handbook applies primarily to Australian Holden vehicles and there may be some differences to the Warranty and Owner Assistance provisions for New Zealand. Applicable details for New Zealand are set out in the Holden Warranty and Owner Assistance Information booklet enclosed in the New Zealand glovebox wallet.

For your convenience, a list of New Zealand Dealers is provided at the end of this Chapter.

New Zealand Assistance can be reached on:

528 1200 (Wellington area, 04)
or **0800 HOLDEN (0800 465336)** from anywhere in New Zealand.

These numbers provide access to New Zealand Roadside Assistance as well as New Zealand Customer Assistance.

If you prefer to write the address is:

The Manager
Service & Customer Satisfaction
Holden New Zealand Ltd.
P. O. Box 40 413
UPPER HUTT

HOLDEN DEALERS

N.S.W. Metropolitan

ARNCLIFFE
Suttons Motors Arncliffe P/L
93 Princes Highway
P: (02) 9335 9000 FAX: (02) 9335 9006

ASHFIELD
Muirs Holden
252 Parramatta Road
P: (02) 9798 8888 Fax: (02) 9799 7010

BALGOWLAH
James Langfield Holden
164 Condamine Street
P: (02) 9949 1888 Fax: (02) 9949 7237

BANKSTOWN
Princeton Holden
466 Chapel Road
P: (02) 9790 1234 Fax: (02) 9790 0033

BLACKTOWN
West City Holden
120~128 Sunnyholt Road
P: (02) 9622 7333 Fax: (02) 9671 7394

CAMPBELLTOWN
Paul Wakeling Holden
Cnr Blaxland & Campbelltown Rds
P: (046) 281 444 Fax: (046) 283 262

CASTLE HILL
Windsor Road Holden
Cnr Victoria Ave/Windsor Rd
P: (02) 9894 6666 Fax: (02) 9894 5600

CHATSWOOD
Sundell Holden
Cnr Smith & Gibbes Street
P: (02) 9417 8431

CHULLORA
Suttons Motors (Chullora) P/L
Cnr Hume Hwy/Waterloo Rd
P: (02) 9642 0233 Fax: (02) 9642 7798

DEE WHY
Peninsula Holden
Cnr May & Mooramba Roads
P: (02) 9982 1311 Fax: (02) 9982 3755

EAST SYDNEY
Suttons City Holden
137-157 Bourke Street
P: (02) 9357 4222 Fax: (02) 9358 5542

GORDON
Sundell Holden
Cnr Pacific Hwy/McIntyre St
P: (02) 9498 7766 Fax: (02) 9498 2906

HOMEBUSH
Suttons Motors Homebush P/L
112 Parramatta Road
P: (02) 9746 4500 Fax: (02) 9746 7206

LAKEMBA
Fulton Holden Lakemba
817 Canterbury Road
P: (02) 9740 5555 Fax: (02) 9740 5907

LANSVALE
Lansvale Holden
266~284 Hume Highway
P: (02) 9728 7333 Fax: (02) 9726 1085

LIVERPOOL
McGrath Holden
411~419 Hume Highway
P: (02) 9821 5000 Fax: (02) 9821 1993

NEWPORT
Newport Car Care Centre
340 Barrenjoey Road
P: (02) 9999 1254

PARRAMATTA
Boyded Holden Parramatta
65 Church Street
P: (02) 9204 6666 Fax: (02) 9635 6346

PENNANT HILLS
Barry Smith Holden
351~355 Pennant Hills Road
P: (02) 9418 8222 Fax: (02) 9484 7475

PENRITH
Penrith City Holden
Cnr Henry St & Macquarie Pl
P: (02) 4732 1966 Fax: (02) 4721 5896

ROCKDALE
Fulton Holden Rockdale
571 Princes Hwy
P: (02) 9567 0321 Fax: (02) 9597 7395

ROSEBERY
Suttons City Holden
Link Road
P: (02) 9931 3000 Fax: (02) 9931 3001

RYDE
Hunter Holden
603~605 Victoria Road
P: (02) 9808 9123 Fax: (02) 9809 6592

SPRINGWOOD
Springwood Holden
15 Ferguson Road
P: (02) 4751 1911 Fax: (02) 4751 2481

ST LEONARDS
Hunter Holden
4 Herbert Street
P: (02) 9906 4044 Fax: (02) 9439 4635

HOLDEN DEALERS CONT.

ST. MARY'S
John Young Holden
Cnr Glossop & Harris Streets
P: (02) 9673 2111 Fax: (02) 9673 4932

SUTHERLAND
Greg Ball Holden
499~505 Princes Highway
P: (02) 9545 4811 Fax: (02) 9545 2533

WAITARA
Suttons Motors Waitara P/L
90 Pacific Hwy
P: (02) 9487 2222 Fax: (02) 9489 0009

WINDSOR
Hawkesbury Valley Holden
18 Macquarie Street
P: (02) 4577 4077 Fax: (02) 4577 2592

N.S.W. Country

ARMIDALE
New State Motors
103 Rusden Street
P: (02) 6772 9444 Fax: (02) 6772 5836

BALLINA
Quayside Motors
Pacific Highway
P: (02) 6686 5111 Fax: (02) 6686 8574

BARHAM
Hall's Motors Pty Ltd
44 Noorong Street
P: (03) 5453 2092 Fax: (03) 5453 1064

BATEMAN'S BAY
Surfair Holden
30-32 Orient Street
P: (044) 725 111

BATHURST
Bathurst Motors
54 Durham Street
P: (02) 6331 2077 Fax: (02) 6331 9177

BEGA
Bega Valley Holden
Cnr Upper and Gipps Sts
P: (02) 6492 2333 Fax: (02) 6492 3105

BLAYNEY
Alan May Auto. Services
98 Adelaide Street
P: (063) 682 745 Fax: (063) 683 257

BOMBALA
Delcott Engineering Pty Ltd
Maybe Street
P: (02) 6458 3341 Fax: (02) 6458 3940

BOOROWA
Boowowa Auto Repairs
40 Marsden Street
P: (063) 853 305

BREWARRINA
Lukas Holden
Bathurst Street
P: (02) 6839 2105 Fax: (02) 6839 2454

BROKEN HILL
Donlee Motors Pty Ltd
Cnr Galena & Rakow Streets
P: (08) 8087 2463 Fax: (08) 8087 7971

CANOWINDRA
Canowindra Motors
Gaskill Street
P: (02) 6344 1105 Fax: (02) 6344 1105

CARDIFF
Brian Kelly Holden
35~39 MacQuarie Road
P: (02) 4954 7733 Fax: (02) 4954 9407

CASINO
Casino Holden
142 Barker Street
P: (02) 66)62 2822 Fax: (02) 6662 2101

CESSNOCK
Geoff Boyd Holden
Cnr Wollombi Road and Darwin Street
P: (02) 4990 3800 Fax: (02) 4991 1544

COBAR
Cobar Holden
Cnr Lewis St & Louth Road
P: (02) 6836 4005 Fax: (02) 6836 3409

COFF'S HARBOUR
Geoff King Holden
Cnr Pacific Hwy and Thompson Road
P: (02) 6652 2288 Fax: (02) 6652 5360

COOMA
Summit Holden
66~70 Sharp Street
P: (02) 6452 1077 Fax: (02) 6452 1142

COONABARABRAN
Coonabarabran Holden
24 Charles Street
P: (02) 6842 1499 Fax: (02) 6842 2473

COONAMBLE
Moody's Motors
37 Aberford Street
P: (02) 6822 1161 Fax: (02) 6822 1624

COOTAMUNDRA
Jenkins Garage
111 Wallendoon Street
P: (02) 6942 2522 Fax: (02) 6942 1493

HOLDEN DEALERS cont.

COWRA
Waugoola Motors Pty Ltd
Kendal Street
P: (02) 6342 1800 Fax: (02) 6342 3614

CROOKWELL
Crookwell Autos
114 Goulburn Street
P: (02) 4832 1433 Fax: (02) 4832 2157

DENILIQUIN
Burchfield Bros & Co
112~114 End Street
P: (03) 5881 2133 Fax: (03) 5881 3322

DORRIGO
Phil Noble Motors
46~48 Hickory Street
P: (02) 6657 2017 Fax: (02) 6657 2217

DUBBO
John Kierath
54 Bourke Street
P: (02) 6882 1011 Fax: (02) 6882 7102

DUNGOG
Turner Holden
248 Dowling Street
P: (02) 4992 1816 Fax: (02) 4992 1833

EDEN
Ron Doyle
113 Princes Highway
P: (02) 6496 1420 Fax: (02) 6496 1467

FINLEY
Riverina Garage Finley
104 Murray Street
P: (03) 5883 1211 Fax: (03) 5883 1638

FORBES
Frank Spice Holden
20~22 Dowling Street
P: (02) 6851 1755 Fax: (02) 6852 2825

GILGANDRA
Gilgandra Holden
3 Morris Street
P: (02) 6847 1888 Fax: (02) 6847 1277

GLEN INNES
Glen Severn Holden
167 Grey Street
P: (02) 6732 2888 Fax: (02) 6732 3394

GLOUCESTER
Grahame's Garage Pty Ltd
1 Park Street
P: (02) 6558 1108 Fax: (02) 6558 2317

GOSFORD
Noble Holden
Pacific Highway
P: (02) 4325 0511 Fax: (02) 4324 1043

GOULBURN
Geissler Motors
279~298 Auburn Street
P: (02) 4821 3744 Fax: (02) 4821 9798

GRAFTON
Ken Casson Holden
37~39 Turf Street
P: (02) 6642 6666 Fax: (02) 6642 6737

GRENFELL
Terry Carroll Motors Pty Ltd
40 Alexandra Street
P: (02) 6343 1522 Fax: (02) 6343 1347

GRIFFITH
Leo Franco Holden
164~166 Yambil Street
P: (02) 6964 2977 Fax: (02) 6962 4916

GUNNEDAH
Namoi Valley Motors
48 Barber Street
P: (02) 6742 0211 Fax: (02) 6742 3842

GUNNING
Bailey's Garage
Yass Street
P: (048) 451 224 Fax: (048) 451 486

HARDEN
Ginty & O'Leary
Cnr Station & Albury Streets
P: (02) 6386 2320 Fax: (02) 6386 2722

HAY
Royce Curtis Motors
168 Lachlan Street
P: (02) 6993 1503 Fax: (02) 6993 2212

HOLBROOK
Lieschke Motors Pty Ltd
Albury Street
P: (060) 362 244 Fax: (060) 362 831

INVERELL
Gaukroger Sales Pty Ltd
Vivian Street
P: (02) 6722 2722 Fax: (02) 6722 1804

JERILDERIE
Jerilderie Motors
Jerilderie Street
P: (03) 5886 1302 Fax: (03) 5886 1734

KANDOS
Chrisfield Holden
11 Angus Street
P: (02) 6379 4204 Fax: (02) 6379 4606

KATOOMBA
Katoomba Holden
136 Great Western Highway
P: (047) 321 966 Fax: (047) 825 546

HOLDEN DEALERS cont.

KEMPSEY
Thoroughgood Holden
118~132 Belgrave Street
P: (02) 6562 1381 Fax: (02) 6562 1383

KIAMA
Glen Fulton Holden
35~41 Collins Street
P: (02) 4232 1888 Fax: (02) 4232 3062

KYOGLE
O & H Holden
128~134 Summerland Way
P: (02) 6632 1711 Fax: (02) 6632 2552

LEETON
John Ryan Holden
47 Pine Street
P: (069) 532 466 Fax: (069) 536 725

LISMORE
John Chant Motors Pty Ltd
21~27 Carrington Street
P: (02) 6621 2601 Fax: (02) 6622 4659

LITHGOW
Lithgow City Holden
255 Main Street
P: (02) 6351 4555 Fax: (02) 6351 4653

MACKSVILLE
Eastland Auto Centre
18~22 Cooper Street
P: (02) 6568 1711 Fax: (02) 6568 1816

MACLEAN
O'Halloran Motors
175 River Street
P: (02) 6645 2844 Fax: (02) 6645 4003

MAITLAND
Heritage Holden
Cnr New England Hwy & Bungaree St
P: (02) 4932 0779 Fax: (02) 4932 0473

MOREE
Keith Haddad Holden
Cnr Boston & Heber Streets
P: (02) 6752 1855 Fax: (02) 6752 1298

MORUYA
Surfair Holden
88 Vulcan Street
P: (02) 4474 2555 Fax: (02) 4474 2129

MOSS VALE
Vagg & Partners Holden
160~162 Argyle Street
P: (02) 4868 1055 Fax: (02) 4868 3330

MULLUMBIMBY
Tony Carsburg Holden
2 Argyle Street
P: (02) 6684 2066 Fax: (02) 6684 2066

MUDGEE
Ross Granata Motors
47~55 Market Street
P: (02) 6372 1766 Fax: (02) 6372 3735

MURWILLUMBAH
Tweed Motors Murwillumbah
29 Prospero Street
P: (02) 6672 4444 Fax: (02) 6672 5811

MUSWELLBROOK
Upper Hunter Motors Pty Ltd
116 Bridge Street
P: (02) 6543 2577 Fax: (02) 6543 2565

NAMBUCCA HEADS
Nambucca Holden
Mann Street
P: (065) 689 477 Fax: (065) 689 477

NARRABRI
Allan Cooper Holden
181 Maitland Street
P: (02) 6792 3488 Fax: (02) 6792 4750

NARROMINE
Terry Green Holden
45~51 Dandaloo Street
P: (02) 6889 1244 Fax: (02) 6889 2277

NEWCASTLE
Newcastle City Holden
745 Hunter Street
P: (02) 4961 5301 Fax: (02) 4961 6485

NOWRA
Glendon Motors Holden
301~313 Princes Highway
P: (02) 4421 0144 Fax: (02) 4423 0854

ORANGE
Canobolas Holden
348 Summer Street
P: (02) 6362 0155 Fax: (02) 6361 3702

PARKES
Broderick Motors Holden
Cnr Mitchell & Clarinda Sts
P: (02) 6862 2266 Fax: (02) 6862 1406

PEAK HILL
S. Leary & Sons Pty Ltd
Mingelo Street
P: (02) 6869 1459 Fax: (02) 6869 1999

PORT MACQUARIE
Bob Todd Motors Pty Ltd
115 Gordon Street
P: (02) 6583 1100 Fax: (02) 6584 9508

QUIRINDI
Browning Motors
82 Henry Street
P: (02) 6746 1666 Fax: (02) 6746 1422

HOLDEN DEALERS cont.

SCONE
Upper Hunter Motors (Scone)
100 Liverpool Street
P: (065) 451 355

SINGLETON
Lancaster Holden
80 John Street
P: (02) 6572 1700 Fax: (02) 6572 4033

TAMWORTH
Kensell's Holden
Cnr Bourke St & Kable Ave
P: (02) 6766 6699 Fax: (02) 6766 7339

TAREE
Hardes Auto House
Beeton Parade
P: (02) 6552 1000 Fax: (02) 6552 1269

TEMORA
Rod Lovering Holden
607-608 Stockinbingal Road
P: (02) 6977 2255 Fax: (02) 6977 2033

TENTERFIELD
Sexton & Green (Sales & Service) P/L
148 Rouse Street
P: (02) 6736 1855 Fax: (02) 6736 1946

TUNCURRY
Great Lakes Holden
144 Manning Street
P: (065) 556 644

TWEED HEADS
Tweed Motors Pty Ltd
75~79 Pacific Highway
P: (075) 363 411 Fax: (075) 364 490

ULLADULLA
Alan May Holden
169 Princes Highway
P: (02) 4455 1213 Fax: (02) 4455 4122

WAGGA WAGGA
Wagga Motors Pty Ltd
32 Dobney Avenue
P: (02) 6925 3411 Fax: (02) 6925 3283

WALCHA
Bowden's Garage Pty Ltd
Derby Street
P: (02) 6777 2226 Fax: (02) 6777 2319

WALGETT
Walgett Garage Pty Ltd
81 Wee Waa Street
P: (02) 6828 1088 Fax: (02) 6828 1198

WALLA WALLA
D.E. Lieschke & Son Pty Ltd
Commercial Street
P: (060) 292 202 Fax: (060) 292 134

WARIALDA
Roger Moore
Hope Street
P: (02) 6729 1570 Fax: (02) 6729 1104

WARILLA
Wilson's Holden
29 Shellharbour Road
P: (02) 4295 1223 Fax: (02) 4296 1007

WARREN
Fuller Bros
Dubbo Street
P: (02) 6847 4978 Fax: (02) 6847 4477

WEE WAA
Allan Cooper Holden
Rose Street
P: (067) 954 255

WELLINGTON
Gersbach's Garage Pty Ltd
92 Lee Street
P: (02) 6845 2733 Fax: (02) 6845 3236

WEST WYALONG
West Wyalong Motors
183 Main Street
P: (02) 6972 2388 Fax: (02) 6972 2570

WOLLONGONG
Dwyers City Holden
31~33 Crown Street
P: (02) 4229 9222 Fax: (02) 4229 5105

WYONG
Barry Robertson Holden
172 Pacific Highway
P: (02) 4351 2588 Fax: (02) 4352 1759

YASS
Bill Nesbitt Holden
221 Comur Street
P: (02) 6226 1866 Fax: (02) 6226 1747

YOUNG
Harden & Geelan Holden
48 Boorowa Street
P: (02) 6382 1155 Fax: (02) 6382 4673

A.C.T.

BELCONNEN
Gerald Slaven Holden
Josephson Street
P: (02) 6251 5111 Fax: (02) 6253 1298

HOLDEN DEALERS cont.

BRADDON
Rolfe Holden
44 Mort Street
P: (02) 6248 7888 Fax: (02) 6257 1328

PHILLIP
Commonwealth Motors Pty Ltd
158 Melrose Drive
P: (02) 6282 3522 Fax: (02) 6282 5214

Tas.

BURNIE
Motors Burnie
Marine Terrace
P: (03) 6431 1122 Fax: (03) 6431 3146

DEVONPORT
Motors Devonport
Victoria Parade
P: (03) 6424 4033 Fax: (03) 6424 5249

HOBART
Motors Pty Ltd
179 MacQuarie Street
P: (03) 6220 1171 Fax: (03) 6223 8117

KING ISLAND
King Island Motors Pty Ltd
Netherby Road, Currie
P: (03) 6462 1155 Fax: (03) 6462 1488

LAUNCESTON
Motors Launceston
93~95 Elizabeth Street
P: (03) 6332 9101 Fax: (03) 6334 5245

SMITHTON
Motors Smithton
Cnr Nelson & Gibson Street
P: (03) 6452 1241 Fax: (03) 6452 3123

ULVERSTONE
Motors Ulverston
97~101 Reibey Street
P: (03) 6425 2277 Fax: (03) 6425 2610

Vic. Metropolitan

BERWICK
Barry Bourke Holden
755 Princes Highway
P: (03) 9707 2222 Fax: (03) 9707 3091

BUNDOORA
Watson Holden
413 Grimshaw Street
P: (03) 9467 4677 Fax: (03) 9467 7661

BURWOOD
Penfold Holden
142 Burwood Highway
P: (03) 9268 1333 Fax: (03) 9268 1335

CHELSEA
Harrison Holden
370 Nepean Highway
P: (03) 9772 2233 Fax: (03) 9772 2190

CHELTENHAM
Booran Holden
1212 Nepean Highway
P: (03) 9584 3333 Fax: (03) 9584 4285

DANDENONG
Booran Holden
17 Lonsdale Street
P: (03) 9794 5455 Fax: (03) 9793 7001

DONCASTER
Doncaster Holden
636~640 Doncaster Road
P: (03) 9840 0188 Fax: (03) 9840 2587

ELSTERNWICK
Reg Hunt Holden
63 Nepean Highway
P: (03) 9528 2222 Fax: (03) 9528 1088

ESSENDON
Preston Motors (Essendon) P/L
205~211 Keilor Road
P: (03) 9374 2888 Fax: (03) 9379 6754

FAWKNER
Mantello Holden
1263 Sydney Road
P: (03) 9359 1333 Fax: (03) 9359 9334

FERNTREE GULLY
Ferntree Gully Holden
980 Burwood Highway
P: (03) 9758 2222 Fax: (03) 9758 3435

FOOTSCRAY
Alan Mance Holden
435 Barkly Street
P: (03) 9687 4222 Fax: (03) 9687 7529

FRANKSTON
Bay City Holden
140 Dandenong Road
P: (03) 9784 4444 Fax: (03) 9784 4419

GEELONG
R & B Smith Holden
510 Moorabool Street
P: (03) 5222 2888 Fax: (03) 5221 3114

GEELONG
Winter & Taylor (Sales) P/L
23 Cavendish Street
P: (03) 5222 1811 Fax: (03) 5221 1873

HOLDEN DEALERS cont.

GLENHUNTLY
Booran Holden
1234 Glenhuntly Road
P: (03) 9571 9313 Fax: (03) 9571 8374

GLEN WAVERLEY
Geoff Brady Holden
565~577 Springvale Road
P: (03) 9550 5888 Fax: (03) 9550 5855

HASTINGS
Westernport Holden
2147 Frankston/Flinders Road
P: (059) 791 503 Fax: (059) 793 845

LILYDALE
Heritage Holden
344 Main Street
P: (03) 9735 5566 Fax: (03) 9735 1040

MELTON
Alan Mance Holden
1 Holland Drive
(03) 9746 9666 Fax: (03) 9746 9555

MORNINGTON
John Collins Holden
976 Nepean Highway
P: (03) 5975 4433 Fax: (03) 5975 4720

OAKLEIGH
Garry & Warren Smith
1575 Dandenong Road
P: (03) 9568 6333 Fax: (03) 9568 5691

PRESTON
Ralph D'Silva Holden
573~603 High Street
P: (03) 9471 0500 Fax: (03) 9478 4210

RINGWOOD
Patterson Cheney Holden
45~57 Maroondah Highway
P: (03) 9262 6666 Fax: (03) 9870 1113

SOUTH MELBOURNE
South City Holden
380 City Road
P: (03) 9627 3333 Fax: (03) 9686 5836

SOUTH YARRA
Penfold Holden
681 Chapel Street
P: (03) 9827 2272 Fax: (03) 9826 5328

SUNBURY
Sunbury Holden
93~95 Horne Street
P: (03) 9740 3000 Fax: (03) 9740 4777

SUNSHINE
Kevin Dennis Holden
272 Ballarat Road
P: (03) 9292 9292 Fax: (03) 9292 9200

WERRIBEE
Ballan Holden
56 Princes Highway
P: (03) 9741 2222 Fax: (03) 9742 3797

WEST MELBOURNE
Reg Hunt Holden
577 King Street
P: (03) 9329 6611 Fax: (03) 9329 1550

Vic. Country

ALEXANDRA
GK & JH Radford
79 Greints Street
P: (03) 5722 1588 Fax: (03) 5722 1978

ARARAT
David Reid Motors
High Street
P: (03) 5352 4100 Fax: (03) 5352 4388

BAIRNSDALE
The Big Garage
199 Main Street
P: (03) 5152 4131 Fax: (03) 5152 5313

BALLARAT
Peter Amor Motors
209~211 Gillies Street
P: (03) 5339 9333 Fax: (03) 5339 9202

BENALLA
Arnott's Motors
88~90 Bridge Street
P: (03) 5762 2500 Fax: (03) 5762 1586

BENDIGO
Ron Poyser Holden
Cnr High & Myrtle Streets
P: (03) 5442 3999 Fax: (03) 5442 7766

BIRCHIP
R.L. & C.J. Bales
38 Cumming Avenue
P: (03) 5492 2543

BOORT
Jaron Motors
55 Godfrey Street
P: (034) 552 008 Fax: (034) 552 008

CAMPERDOWN
Camperdown Auto Parts
96 Manifold Street
P: (03) 5593 1983 Fax: (03) 5593 1979

HOLDEN DEALERS cont.

CASTERTON
Coxons Holden
139 Henty Street
P: (03) 5581 1166 Fax: (03) 5581 2116

CHARLTON
K.V. Charlton
70 High Street
P: (03) 5491 1444 Fax: (03) 5491 1984

COBRAM
Neville Mustica Motors
Murray Valley Hwy
P: (03) 5872 1666 Fax: (03) 5872 1920

COHUNA
Hare Motors Holden
105~107 King George Street
P: (03) 5456 4488 Fax: (03) 5456 4448

COLAC
Parker Bros. Motor Co
224 Murray Street
P: (03) 5231 5533 Fax: (03) 5231 3853

DAYLESFORD
K.R. Little
Vincent Street
P: (03) 5348 2248

DIMBOOLA
Westerfield Motors Pty Ltd
64 Lloyd Street
P: (03) 5389 1302

DONALD
O.A. Shilton & Sons Pty Ltd
5 Wood Street
P: (03) 5497 1400 Fax: (03) 5497 1505

ECHUCA
Echuca Motors
1 Nothern Highway
P: (03) 5482 1522 Fax: (03) 5480 6215

FOSTER
Ray Dower Motors
78 Main Street
P: (03) 5682 2404

HAMILTON
Peter Sandow Motors Pty Ltd
261 Gray Street
P: (03) 5572 1433 Fax: (03) 5571 1182

HOPETOUN
Hopetoun Motors
78 Lascelles Street
P: (03) 5083 3143 Fax: (03) 5083 3290

HORSHAM
Ivan Morrow Motors Pty Ltd
22 O'Callaghans Street
P: (03) 5382 0185 Fax: (03) 5382 0459

KANIVA
Kaniva Motors
82 Commercial Street
P: (03) 5392 2300 Fax: (03) 5392 2589

KOOWEERUP
G & J Light Mechanical repairs P/L
Station Road
P: (03) 5997 1325

KORUMBURRA
Peter Dunlevie Holden
42 Commercial Street
P: (03) 5655 1288 Fax: (03) 5655 1839

KYABRAM
D'Alberto Holden
60 McEwen Road
P: (03) 5852 1366 Fax: (03) 5852 1337

KYNETON
Mollison Motors Pty Ltd
167 Mollison Street
P: (03) 5422 3377 Fax: (03) 5422 3501

LEONGATHA
Gleeson Holden
37~43 Bair Street
P: (03) 5662 2361 Fax: (03) 5662 3393

MANSFIELD
Martin's Garage
52~54 Chenery Street
P: (03) 5775 2610 Fax: (03) 5775 1179

MARYBOROUGH
Graham Jacka Holden
35 Nolan Street
P: (03) 5461 1011 Fax: (03) 5461 4789

MILDURA
Stuart & Harrison (Sales) Pty Ltd
24~32 Deakin Avenue
P: (03) 5023 0051 Fax: (03) 5021 3076

MORTLAKE
W. Christian (Mortlake) Pty Ltd
107 Dunlop Street
P: (03) 5599 2301 Fax: (03) 5599 2567

MURRAYVILLE
Peers Motors
McKenzie Street
P: (03) 5095 2081 Fax: (03) 5095 2054

HOLDEN DEALERS cont.

NATHALIA
BHB Motors
6 Blake Street
P: (03) 5866 2660

NHILL
Ivan Morrow Motors Pty Ltd
71~73 Nelson Street
P: (03) 5391 1333 Fax: (03) 5391 1228

NULLAWIL
Nullawil Motors & General Engineers
Calder Highway
P: (03) 5493 5210 Fax: (03) 5493 5210

ORBOST
Merlin Motors
Stanley Street
P: (03) 5154 1909

PORTLAND
Reynolds Holden
Henty Highway
P: (03) 5523 1688 Fax: (03) 5523 6299

QUAMBATOOK
Quambatook Auto Services
32 Gutherie Street
P: (03) 5457 1237 Fax: (03) 5457 1420

ROCHESTER
Bruce Hocking Motors Pty Ltd
71 Moore Street
P: (03) 5484 1455 Fax: (03) 5484 1140

ROBINVALE
Stuart & Harrison (Sales) Pty Ltd
cnr Herbert & George Sts
P: (03) 5026 3305

RUTHERGLEN
Jasper Bros Pty Ltd
62 Main Street
P: (03) 6032 8408 Fax: (03) 6032 8156

SALE
Keith Boyd Holden
273 York Street
P: (03) 5144 3944 Fax: (03) 5144 6289

SEALAKE
Paddy Smith Holden
Calder Highway
P: (03) 5070 1147

SEYMOUR
Neil Beer Holden
49 Emily Street
P: (03) 5792 2777 Fax: (03) 5792 4111

SHEPPARTON
Parker Bros. Auto Co.
Benalla Road
P: (03) 5821 9811 Fax: (03) 5831 1021

STAWELL
Howden Holden
72~76 Longfield Street
P: (03) 5358 1888 Fax: (03) 5358 3954

SWAN HILL
Swan Hill Holden
94~102 Campbell Street
P: (03) 5033 1800 Fax: (03) 5032 2468

TALLANGATTA
Crispin Motors
21 Towong Street
P: (060) 712 414 Fax: (060) 712 655

TIMBOON
Timboon Motors
Bailey Street
P: (03) 5598 3007 Fax: (03) 5598 3362

TRARALGON
Colin Watson Holden
Princes Highway
P: (03) 5174 8000 Fax: (03) 5175 0050

UNDERBOOL
A.J. Gloster & Sons
Cotter Street
P: (03) 5094 6291 Fax: (03) 5094 6297

WANGARATTA
Alan Capp (New Cars) Pty Ltd
Tone Road
P: (03) 5721 2133 Fax: (03) 5721 4626

WARRACKNABEAL
Amor Motors Aubrey Truck Sales
33 Woolcock Street
P: (03) 5394 1055 Fax: (03) 5398 1904

WARRAGUL
Vin Rowe Holden
3 Endeavour Street
P: (03) 5623 1362 Fax: (03) 5623 4314

WARRNAMBOOL
Callaghan Motors Pty Ltd
133~137 Fairy Street
P: (03) 5562 3711 Fax: (03) 5562 7415

WODONGA
McRae White Motors
182 Melbourne Road
P: (02) 6056 2333 Fax: (02) 6024 7899

WONTHAGGI
J.P. Holden
2 Murray Street
P: (03) 5672 1122 Fax: (03) 5672 4141

YARRAM
John Palmer Holden
150 Commercial Road
P: (03) 5182 5122 Fax: (03) 5182 6166

HOLDEN DEALERS cont.

YARRAWONGA
Pigdons Pty Ltd
Belmore Street
P: (03) 5743 1577 Fax: (03) 5744 1788

Qld. Metropolitan

ALBION
Bill Harrison Car Sales
Frodsham Street & Crosby Road
P: (07) 3262 2455 Fax: (07) 3262 5728

ASPLEY
Zupps Aspley Pty Ltd
1454 Gympie Road
P: (07) 3246 8000 Fax: (07) 3263 7036

CAPALABA
Oldfield Holden
103 Redland Bay Road
P: (07) 3245 2200 Fax: (07) 3245 2221

INDOOROOPILLY
Westpoint Holden
440 Moggill Road
P: (07) 3378 6622 Fax: (07) 3878 1340

IPSWICH
Ross Llewellyn Holden
246 Brisbane Road
P: (07) 3282 2922 Fax: (07) 3282 6359

MOOROOKA
John Sivyer Holden
1060 Ipswich Road
P: (07) 3892 3344 Fax: (07) 3848 7816

MT. GRAVATT
Zupps Motors Pty Ltd
1310 Logan Road
P: (07) 3877 0000 Fax: (07) 3877 0066

NEWSTEAD
Eagers Retail Pty Ltd
95 Breakfast Creek Road
P: (07) 3364 1199 Fax: (07) 3364 1099

PETRIE
Petrie Holden
1059 Gympie Road
P: (07) 3285 2244 Fax: (07) 3285 1975

REDCLIFFE
Village Holden
425 Elizabeth Avenue
P: (07) 3284 7344 Fax: (07) 3883 2711

SPRINGWOOD
Motorama Holden
3455 Pacific Highway
P: (07) 3208 8888 Fax: (07) 3208 7018

WINDSOR
Leach Holden
143 Newmarket Road
P: (07) 3357 6711 Fax: (07) 3357 5403

WOOLLOONGABBA
Armstrong Holden
73 Ipswich Road
P: (07) 3891 5522 Fax: (07) 3891 5146

WYNNUM
Doug Barton Holden
200 Tingal Road
P: (07) 3396 7777 Fax: (07) 3393 3593

Qld. Country

ATHERTON
Redding Motors Pty Ltd
2 Cook Street
P: (07) 4091 1344 Fax: (07) 4091 2039

AYR
Honeycombes Sales & Service
213~217 Queen Street
P: (07) 4783 2344 Fax: (07) 4783 2079

BEAUDESERT
Lawson Holden
57 Brisbane Street
P: (07) 5541 2000 Fax: (07) 5541 3368

BOWEN
McDermott Holden
98 Herbert Street
P: (07) 4786 1430 Fax: (07) 4786 2903

BUNDABERG
Ross Gray Holden
Takalvan Street
P: (07) 4152 1666 Fax: (07) 4151 5788

CABOOLTURE
Beecham Holden
Bribie Island Road
P: (07) 5495 1477 Fax: (07) 5495 2839

CAIRNS
Ireland Holden
227~233 Mulgrave Road
P: (07) 4052 3666 Fax: (07) 4052 3606

CALOUNDRA
Caloundra City Holden
45 Caloundra Road
P: (07) 5491 5522 Fax: (07) 5491 8016

CHARLEVILLE
Alan Dobbin Holden
129 Alfred Street
P: (07) 4654 1737 Fax: (07) 4654 3254

HOLDEN DEALERS cont.

CHARTERS TOWERS
Peters Holden
57 Mosman Street
P: (07) 4787 1177 Fax: (07) 4787 4858

CHINCHILLA
Ainsworth Motors & Machinery Pty Ltd
55 Chinchilla Street
P: (07) 4662 7286 Fax: (07) 4662 7197

CROWS NEST
Dennis Nissen Motors
14 William Street
P: (07) 4698 1300 Fax: (07) 4698 1495

DALBY
Johnson's Holden
36 Drayton Street
P: (07) 4662 2422 Fax: (07) 4662 4311

EMERALD
Orion Holden
Hospital Road
P: (07) 4980 7622 Fax: (07) 4982 2791

GATTON
Gatton Auto Centre
67 Railway Street
P: (07) 5462 1633 Fax: (07) 5462 1980

GLADSTONE
Andersons Auto City
56 Yarroon Street
P: (07) 4972 1177 Fax: (07) 4972 9141

GYMPIE
Madills
35 Mellor Street
P: (07) 5482 2522 Fax: (07) 5482 2672

HERVEY BAY
Whitaker Motor World
96 Torqyay Road
P: (07) 1281 722

INGHAM
Devietti Holden
99 Lannercost Street
P: (07) 4776 1599 Fax: (07) 4776 3547

INNISFAIL
I.C. Taylor Pty Ltd
117 Edith Street
P: (07) 4061 1577 Fax: (07) 4061 3963

JULIA CREEK
Julia Creek Motors Pty Ltd
Burke Street
P: (07) 4746 7155 Fax: (07) 4746 7197

KILCOY
Hobart's Garage
58 Mary Street
P: (07) 5497 1204 Fax: (07) 5497 1204

KINGAROY
John Dundas Pty Ltd
38 King Street
P: (07) 4162 1722 Fax: (07) 4162 3756

LAIDLEY
Buhse's Garage Pty Ltd
5 Spicer Street
P: (07) 5465 1406 Fax: (07) 5465 1706

LONGREACH
Longreach Motors
33 Swan Street
P: (07) 4658 1700 Fax: (07) 4658 1857

MACKAY
Pioneer Holden
Cnr Gordon & Wellington Streets
P: (07) 4957 2771 Fax: (07) 4951 3591

MAROOCHYDORE
Sunco Holden
Wises Road
P: (07) 5443 7644 Fax: (07) 5443 7645

MARYBOROUGH
Whitaker Holden
109~111 March Street
P: (07) 4122 2255 Fax: (07) 4123 1912

MOUNT ISA
Barkly Motors Pty Ltd
Marian Street
P: (07) 4743 3044 Fax: (07) 4743 8466

MURGON
Clifton Motors
Macalister Street
P: (07) 4168 1066 Fax: (07) 4168 1947

NAMBOUR
Kallenbach Motors
139 Howard Street
P: (07) 5441 3099 Fax: (07) 5441 3105

NANANGO
Nanango Motors Pty Ltd
102 Drayton Street
P: (07) 4163 1108 Fax: (07) 4163 1108

NOOSAVILLE
Madill's Noosa
Cnr Weyba Road and Mary Street
P: (07) 5449 7900 Fax: (07) 5449 0828

PROSERPINE
Crossley Car Sales Whitsunday Pty Ltd
162~164 Main Street
P: (07) 4945 1822 Fax: (07) 4945 2022

ROBINA
Smith's Robina Holden
16 Brabham Circuit
P: (07) 5575 0500 Fax: (07) 5562 1072

HOLDEN DEALERS cont.

ROCKHAMPTON
Lawrence's
327 Richardson Road
P: (07) 4930 5111 Fax: (07) 4930 5112

ROMA
Maranoa Multi Agencies
Bowen Street
P: (07) 4622 2900 Fax: (07) 4622 1832

SOUTHPORT
Lockhart Holden
Cnr Nerang Road & Olsen Avenue
P: (07) 5597 2900 Fax: (07) 5597 2542

SPRINGSURE
Springsure Motors
Eclipse Street
P: (07) 4984 1177 Fax: (07) 4984 1361

ST. GEORGE
Halpin Motors
39~41 Grey Street
P: (07) 4625 5466 Fax: (07) 4625 5855

STANTHORPE
Central Motors
42 Maryland Street
P: (07) 4681 2200 Fax: (07) 4681 1479

TOOWOOMBA
Toowoomba Holden
Cnr James & Hume Streets
P: (07) 4690 0900 Fax: (07) 4690 0909

TOWNSVILLE
Tony Ireland Holden
87~91 Charters Towers Road
P: (07) 4726 7777 Fax: (07) 4721 1486

TULLY
Island Coast Holden
12 Richardson Street
P: (07) 4068 1288 Fax: (07) 4068 2145

WARWICK
Deighton Motors Pty Ltd
Grafton Street
P: (07) 4661 2266 Fax: (07) 4661 1275

N.T.

ALICE SPRINGS
Kittles Holden
Cnr Wills & Railway Terrace
P: (08) 8952 1155 Fax: (08) 8953 1556

DARWIN
Kerry Holden
21~25 Stuart Highway
P: (08) 8980 8080 Fax: (08) 8980 8081

KATHERINE
Kittles Holden
441 Victoria Highway
P: (08) 8972 1788 Fax: (08) 8971 0209

TENNANT CREEK
Kittles Holden
Paterson Street
P: (08) 8962 2251 Fax: (08) 8962 2527

S.A. Metropolitan

ADELAIDE
City Holden
223 Grenfell Street
P: (08) 8223 7666 Fax: (08) 232 0718

ELIZABETH
Peter Page Holden
Elizabeth Way
P: (08) 8255 1288 Fax: (08) 8255 9260

MALVERN
Claridge Holden
361~367 Unley Road
P: (08) 8272 1600 Fax: (08) 8373 0057

PORT ADELAIDE
Smiths of Port Adelaide
271 Commercial Road
P: (08) 8447 3855 Fax: (08) 84473 978

REYNELLA
Southgate Holden
49~59 Main South Road
P: (08) 8381 9555 Fax: (08) 8381 6274

SOMERTON PARK
Hamilton Holden
278~288 Brighton Road
P: (08) 8296 4866 Fax: (08) 8296 7112

THEBARTON
Metro Holden
1 Port Road
P: (08) 8354 9555 Fax: (08) 8443 6855

VALLEY VIEW
Plaza Holden
817~839 North East Road
P: (08) 8263 4922 Fax: (08) 8265 5200

S.A. Country

BALAKLAVA
Balaklava Motors
4 Wallace Street
P: (08) 8862 1030 Fax: (08) 8862 2000

HOLDEN DEALERS cont.

BERRI
Rosenthal Bros Pty Ltd
Vaughan Terrace
P: (08) 8582 3644 Fax: (08) 8582 3515

BORDERTOWN
Farmer's Centre
South Terrace
P: (087) 520 266

CEDUNA
Beck Motors Pty Ltd
Poynton Street
P: (08) 8625 2616 Fax: (08) 8625 3201

CLARE
Mid North Motor Company
7 Old North Road
P: (08) 8842 2200 Fax: (08) 8842 2886

CLEVE
Herbert Motors Pty Ltd
Rudall Road
P: (08) 8628 2150 Fax: (08) 8628 2537

CUMMINS
Trigg & Wedd
3 Umlauf Street
P: (086) 762 105 Fax: (086) 762 303

CRYSTAL BROOK
Crouch Rural Pty. Ltd
26 Brandis Street
P: (08) 8636 2257 Fax: (08) 8636 2088

GAWLER
Steinborner Holden
Cnr Murray & Bridge Sts
P: (08) 8522 4222 Fax: (08) 85) 8522 4898

KADINA
J.H. Rosewarne Pty Ltd
Graves Street
P: (08) 8821 1111 Fax: (08) 8821 1686

KEITH
Farmers Centre
McBain Street
P: (08) 8755 3222 Fax: (08) 8755 3211

KINGSCOTE
Roberts Motors
Telegraph Road
P: (084) 822 021 Fax: (084) 822 853

KIMBA
R.J. Flavel Mechanical Repairs
30 High Street
P: (086) 272 555 Fax: (086) 272 044

KINGSTON
Lecornu's Service Garage
Agnes Street
P: (08) 8767 2424 Fax: (08) 8767 2533

LOXTON
Flight Motors Pty Ltd
Bookpurnong Terrace
P: (08) 8584 7277 Fax: (08) 8584 5937

MINLATON
Southway
9 Fifth Street
P: (08) 8853 2322 Fax: (08) 8853 2451

MAITLAND
Maitland Motors Pty Ltd
58 Robert Street
P: (08) 8832 2601 Fax: (08) 8832 2673

MENINGIE
Peter Hood Holden
Cnr Princes Highway & Coonalpyn Road
P: (08) 8575 1109 Fax: (08) 8575 1537

MILLICENT
O G R Millicent
98 George Street
P: (08) 8733 3488 Fax (08) 8733 3112

MT. BARKER
Gilbert Motors
57 Adelaide Road
P: (08) 8391 1500 Fax: (08) 8398 2124

MT. GAMBIER
O.G. Roberts & Co
Jubilee Highway West
P: (08) 8725 6788 Fax: (08) 8723 0636

MURRAY BRIDGE
Dutton Motors Pty Ltd
7 Adelaide Road
P: (08) 8532 1999 Fax: (08) 8531 0599

NARACOORTE
Kingcraig Motors Pty Ltd
158~164 Smith Street
P: (08) 8762 1555 Fax: (08) 8762 1806

PORT AUGUSTA
Hayes Augusta Motor Company
38 Stirling Road
P: (08) 8641 0488 Fax: (08) 8642 4300

PORT LINCOLN
City Motors
King Street
P: (08) 8682 1100 Fax: (08) 8682 4734

HOLDEN DEALERS cont.

PORT PIRIE
Spencer Holden
50 Ellen Street
P: (08) 8632 3888 Fax: (08) 8632 6405

RENMARK
Rosenthal Motors Pty Ltd
Ral Ral Avenue
P: (08) 8586 6626 Fax: (08) 8586 4040

ROXBY DOWNS
Augusta Motor Co.
10 Gosse Street
P: (086) 710 100 Fax: (086) 710 950

STRATHALBYN
Gilbert Holden Strathalbyn
High Street
P: (08) 8536 2066 Fax: (08) 8536 2672

TANUNDA
Hage & Co Pty Ltd
50 Murray Street
P: (08) 8563 2123 Fax: (08) 8563 3488

VICTOR HARBOR
Southern Motors Holden
5 Victoria Street
P: (08) 8552 1255 Fax: (08) 8555 2788

WAIKERIE
Riverside Holden
6 Crush Terrace
P: (08) 8541 2900 Fax: (08) 8541 3325

WHYALLA
Whyalla Motor Company
64 Essington Lewis Avenue
P: (08) 8645 7388 Fax: (08) 8645 5512

YANKALILLA
Martin Motors Pty Ltd
Main Street
P: (08) 8558 2052 Fax: (08) 8558 2911

YORKETOWN
Southway Holden
7 Minalaton Road
P: (08) 8852 1322 Fax: (08) 8852 1271

W.A. Metropolitan

CANNINGTON
Brian Gardner Holden
1308~1324 Albany Hwy
P: (08) 9451 2333 Fax: (08) 9458 9144

FREMANTLE
Shacks Holden
64 Queen Victoria Street
P: (08) 9432 9400 Fax: (08) 9432 9456

GOSNELLS
Lance Gibbons Holden
2325 Albany Highway
P: (08) 9398 2211 Fax: (08) 9398 5683

MANDURAH
Mandurah Holden
283 Pinjarra Rd
P: (08) 9535 8777 Fax: (08) 9535 8822

MELVILLE
Melville Motors Pty Ltd
532~540 Canning Highway
P: (08) 9333 5333 Fax: (08) 9333 5300

MIDLAND
Goldy Holden
161 Great Eastern Highway
P: (08) 9274 3411 Fax: (08) 9274 6042

MORLEY
Metro Motors
212 Walter Road
P: (08) 9449 3522 Fax: (08) 9449 3596

NAVAL BASE
Shacks Cockburn
15 Rockingham Road
P: (08) 9410 1433 Fax: (08) 9410 2331

OSBORNE PARK
North City Holden
Cnr Scarborough Beach Rd & Harborne St
P: (08) 9273 2222 Fax: (08) 9273 2220

PERTH
City Motors
505 Newcastle Street
P: (08) 9422 7777 Fax: (08) 9422 7630

VICTORIA PARK
Youngs Holden
529 Albany Highway
P: (08) 9449 9449 Fax: (08) 9449 9494

WANNEROO
Phoenix Holden
5 Berriman Drive
P: (08) 9409 9200 Fax: (08) 9309 2140

W.A. Country

ALBANY
Mark Loveridge Holden
92~98 Earl Street
P: (08) 9841 2355 Fax: (08) 9841 8623

BRIDGETOWN
Kordics Bridgetown
Hampton Street
P: (08) 9761 1377 Fax: (08) 9761 2151

HOLDEN DEALERS cont.

BROOKTON
Coote Motors
Robinson Road
P: (08) 9642 1108 Fax: (08) 9642 1003

BROOME
Norwest Holden
McPherson Street
P: (08) 9192 1277 Fax: (08) 9192 2230

BUNBURY
Bunbury Holden
3 Sandridge Road
P: (08) 9791 3899 Fax: (08) 9791 2990

BUSSELTON
Fennessy's
4~8 Bussel Hwy
P: (08) 9752 1577 Fax: (08) 9752 4080

CARNAMAH
T & H Walton Stores Pty Ltd
Robertson Street
P: (08) 9951 1130 Fax: (08) 9951 1082

CARNARVON
North West Autos
175 Robinson Street
P: (08) 9941 1159 Fax: (08) 9941 1363

COLLIE
Station Motors
102 Throssell Street
P: (08) 9734 1855 Fax: (08) 9734 1913

CORRIGIN
Farmpower
Kunjin Street
P:(08) 9063 2303 Fax: (08) 9063 2445

CRANBROOK
Cranbrook Motors
11~13 Gathorne Street
P: (08) 9826 1014 Fax: (08) 9826 1097

DALWALLINU
Reid & Inglis
Johnson Street
P: (08) 9661 1120 Fax: (08) 9661 1243

DERBY
BP Colac
Loch Street
P: (08) 9191 1429

ESPERANCE
Dempster Holden
Norseman Road
P: (08) 9071 1155 Fax: (08) 9071 3799

GERALDTON
Young Motors
Cathedral Avenue
P: (08) 9921 1088 Fax: (08) 9964 1157

GNOWANGERUP
G.S. Hendry & Co Pty Ltd
Yougenup Street
P: (08) 9827 1030 Fax: (08) 9827 1460

HARVEY
Stockman Holden
111 Uduc Road
P: (08) 9729 3333 Fax: (08) 9729 3221

KALGOORLIE
Golden City Holden
114 Boulder Road
P: (08) 9021 1699 Fax: (08) 9021 5737

KARRATHA
Moxham Motors
Lot 4551 Balmoral Road
P: (08) 9144 1225 Fax: (08) 9144 1258

KATANNING
Edwards Holden
159 Clive Street
P: (08) 9821 2388 Fax: (08) 9821 2429

KELLERBERRIN
Dowding Motors
1 Mitchell Street
P: (08) 9045 4141 Fax: (08) 9045 4466

KOJONUP
Harris' Garage
Albany Highway
P: (08) 9831 1122 Fax (08) 9831 1043

KULIN
Farmpower
High Street
P: (08) 9880 1266 Fax: (08) 9808 1281

KUNUNURRA
Elgee Holden
231 Bloodwood Drive
P: (08) 9168 2236 Fax: (08) 9169 1124

MANJIMUP
Manjimup Automotive Services
Pritchard Street
P: (08) 9771 1388 Fax: (08) 9777 1214

MERREDIN
Carson's of Merredin
112 Barrack Street
P: (08) 9041 1444 Fax: (08) 9041 1765

HOLDEN DEALERS cont.

MOORA
Frank Lewis Holden
Gardiner Street
P: (08) 9651 1408 Fax: (08) 9651 1724

NAREMBEEN
Aquip Holden
20 Churchill Avenue
P: (08) 9064 7214 Fax: (08) 9064 7065

NARROGIN
Marley White & Co
Federal Street
P: (08) 9881 4777 Fax: (08) 9881 4707

NEWMAN
Cockburn Corefleet
Newman Drive
P: (08) 9175 1421

NORTHAM
Withnell Motors
58 Fitzgerald Street
P: (08) 9622 1188 Fax: (08) 9622 3664

PORT HEDLAND
15 Anderson Street
Moxham Motors
P:(08) 9173 3660 Fax: (08) 9144 1258

QUAIRADING
Farmpower
York Road
P: (08) 9645 1103 Fax: (08) 9645 1310

TOM PRICE
Farnor Motors Pty. Ltd.
43 Booneroo Road
P: (08) 9189 1400

WAGIN
Marley White & Co
63 Tudor Street
P: (08) 9861 1055 Fax: (08) 9861 1657

WEDGEFIELD
N & L Mechnical
Lot 3780 Carlinde Street
P: (08) 9172 2623 Fax: (08) 9172 2896

WONGAN HILLS
Agro Machinery Pty Ltd
10 Wongan Road
P: (08) 9671 1311 Fax: (08) 9671 1505

WYALKATCHEM
Agro Machinery
Railway Terrace
P: (08) 9681 1088 Fax: (08) 9681 1082

NEW ZEALAND DEALERS

Auckland Metropolitan

HENDERSON
West City Holden
435 Great North Road
P: (09) 836 0097 Fax: (09) 837 5291

MANUKAU
Davie Motors Limited
58 Cavendish Drive
P: (09) 262 1012 Fax: (09) 262 1011

NEWMARKET
Schofield & Co. Limited
50 Great South Road
P: (09) 520 6369 Fax: (09) 524 1500

PANMURE
Moyes Motor Group Limited
510 Ellerslie/Panmure Highway
P: (09) 527 1200 Fax: (09) 527 8314

TAKAPUNA
Giltrap Holden
Wairau Road
P: (09) 444 8114 Fax: (09) 444 8008

ALEXANDRA
Currie Motors
65 Centennial Avenue
P: (03) 448 6989 Fax: (03) 448 9384

AMBERLEY
Arthur Burke Limited
Markham Street
P: (03) 314 8121 Fax: (03) 314 8281

ASHBURTON
Smallbone Brothers Limited
Cnr. Burnett & Cass Streets
P: (03) 308 7159 Fax: (03) 308 8171

BLENHEIM
Wadsco Motors Limited
55-59 Scott Street
P: (03) 578 5199 Fax: (03) 578 2572

CAMBRIDGE
Windsor Motor Co. Cambridge Limited
Queen Street
P: (07) 827 5009 Fax: (07) 827 5512

CHRISTCHURCH
Blackwell Motors Limited
Cnr. Cashell/Madras Streets
P: (03) 379 5500 Fax: (03) 366 4683

DARGAVILLE
Marcel Motors Limited
34 Victoria Street
P: (09) 439 7399 Fax: (09) 439 7399

DUNEDIN
Cooke Howlison Limited
484 Andersons Bay Road
P: (03) 456 0570 Fax: (03) 455 5668

FEILDING
Tony Moore (1995) Limited
40-42 Kimbolton Road
P: (06) 323 8769 Fax: (06) 323 9128

GISBORNE
Enterprise Cars (1992) Limited
323 Gladstone Street
P: (06) 867 8368 Fax: (06) 867 1280

HAMILTON
Ebbett Waikato Limited
Anglesea Street
P: (07) 838 0949 Fax: (07) 838 3380

HASTINGS
Karamu Auto Court
Cnr. Karamu Road & Albert Street
P: (06) 876 6700 Fax: (06) 876 6664

HAWERA
Moller Johnson Motors (Hawera) Limited
39-49 Regent Street
P: (06) 278 7166 Fax: (06) 278 5054

INVERCARGILL
GWD-Russells Limited
22 Yarrow Street
P: (03) 218 2149 Fax: (03) 218 3309

KAIKOHE
Bay Motors Limited
Wihongi Street
P: (09) 401 1860 Fax: (09) 401 0883

KAITAIA
Jim Crene Motors Limited
Melba Street
P: (09) 408 1310 Fax: (09) 408 1311

LEVIN
Horowhenua Motor Co. Limited
1-11 Exeter Street
P: (06) 368 7169 Fax: (06) 368 8536

LOWER HUTT
Brendan Foot Motors Limited
16-18 Railway Avenue
P: (04) 587 0005 Fax: (04) 566 2311

MASTERTON
Wagg & Harcombe Limited
87-93 Dixon Street
P: (06) 377 5169 Fax: (06) 378 8840

MATAMATA
Matamata Motor Group Limited
2 Arawa Street
P: (07) 888 7059 Fax: (07) 888 5709

NEW ZEALAND DEALERS cont.

MORRINSVILLE
Nicholson United Autos
Thames Street
P: (07) 889 7042 Fax: (07) 889 3529

NELSON
Nelson Holden
157 Haven Road
P: (03) 548 1700 Fax: (03) 548 1701

NEW PLYMOUTH
Auto City
105-113 Gill Street
P: (06) 758 0919 Fax: (06) 758 5330

OAMARU
North Otago Motor Group Limited
24-30 Severn Street
P: (03) 434 5099 Fax: (03) 434 9983

OTOROHANGA
Pat Prescott Limited
8 Te Kanawa Street
P: (07) 873 7119 Fax: (07) 873 7156

PAEROA
Linn Motors Limited
Belmont Road
P: (07) 862 8715 Fax: (07) 862 8711

PAHIATUA
Jones Motors Limited
34 Main Street
P: (06) 376 7524 Fax: (06) 376 7192

PALMERSTON NORTH
Robertson Motors
15-17 Princess Street
P: (06) 358 1062 Fax: (06) 359 0303

PARAPARAUMU
Guy Weaver Auto Village
Main Road
P: (04) 298 8089 Fax: (04) 298 7186

PUKEKOHE
Counties Motorcourt Limited
Cnr. Edinburgh & Tobin Streets
P: (09) 238 3259 Fax: (09) 238 3298

ROTORUA
Shorland Slater Limited
Old Taupo Road
P: (07) 348 3179 Fax: (07) 347 1503

STRATFORD
Ansford Johnson Limited
369 Broadway
P: (06) 765 6119 Fax: (06) 765 7410

TAUMARUNUI
Turaki Motors Limited
Hakiaha Street
P: (07) 895 7009 Fax: (07) 895 8909

TAUPO
Taupo Holden
Ruapehu Street
P: (07) 378 4130 Fax: (07) 378 0357

TAURANGA
1st Motor Company
Cnr. Wharf Street & Cameron Road
P: (07) 578 2843 Fax: (07) 578 6044

TE AROHA
Summit Motor Co. Limited
Kenrick Street
P: (07) 884 8174 Fax: (07) 884 8133

TE AWAMUTU
Rosetown Motors Limited
Cnr. Churchill & Mahoe Streets
P: (07) 871 5143 Fax: (07) 871 5045

TE PUKE
Bob Batchelor Motors Limited
Jellicoe Street
P: (07) 573 9781 Fax: (07) 573 6057

THAMES
Linn Motors
Jellicoe Crescent
P: (07) 868 9591 Fax: (07) 868 9595

TIMARU
Hervey Motors Limited
6 Sefton Street
P: (03) 684 7179 Fax: (03) 684 7176

UPPER HUTT
Twin Lakes Motor Company
Fergusson Drive
P: (04) 528 5609 Fax: (04) 527 8390

WANGANUI
Bob Burgess Motors Limited
1 Purnell Street
P: (06) 345 5588 Fax: (06) 345 5584

WELLINGTON
Williams & Adams
72-82 Taranaki Street
P: (04) 801 6777 Fax: (04) 385 7437

WESTPORT
Craddock's Energy Centre
197 Palmerston Street
P: (03) 789 7819 Fax: (03) 789 7819

WHAKATANE
Harts Limited
Commerce Street
P: (07) 308 6334 Fax: (07) 307 1536

WHANGAREI
Westons Motors Limited
86-96 Walton Street
P: (09) 438 3199 Fax: (09) 438 2646

CHAPTER 10

Tow and Load

Page

10-2 Loading
10-4 Towing
10-5 Towing precautions

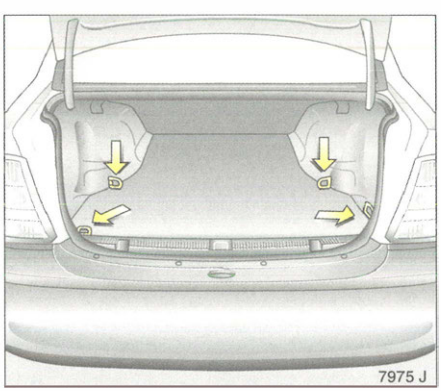
LOADING THE CAR

Notes on loading the car

- Heavy objects in the luggage compartment should be placed as far forward as possible against the rear seat backrests or, if the rear seat backrests are folded down, against the upright rear seat cushion. If objects are to be stacked, the heavier objects should be placed at the bottom. Unsecured objects in the luggage compartment would be thrown forward with great force with heavy braking.
- Loads should not protrude above the upper edge of the rear seat backrests, or above the upper edge of the front seat backrests if the rear seat backrests are folded down.
- Heavy objects should, if necessary, be secured with lashing straps (if fitted) attached to lashing eyes (see below). If heavy loads slip when the car is braked heavily or driven around a bend, the handling of the car may change.
- No object should be placed in front of the rear window or on the instrument panel. They are reflected in the glass, obstruct the driver's view and will be thrown through the car in the event of heavy braking.
- Bulky objects should not be transported with the boot/tailgate open or ajar, otherwise poisonous exhaust fumes may enter the car. In addition, the number plate is only clearly distinguishable and lit correctly if the boot/tailgate is closed.
- Driving with a roof load increases the sensitivity of the car to cross-winds and affects on car handling owing to the higher centre of gravity of the car.

Lashing eyes (if fitted)

These enable cargo to be secured in position in the luggage compartment using lashing straps (if fitted).



LOADING THE CAR cont.

Overloading is a safety hazard and could also shorten the life of your car or its parts. The recommended carrying capacity of your car is: 480 kg (including 5 occupants and luggage).
If you load your car other than to the above recommendations then you should ensure that the MAXIMUM REAR AXLE LOAD and the GROSS VEHICLE WEIGHT are not exceeded.

Kerb weight

The kerb weights shown in the chart are for the weight of a standard unloaded car, without any options, but with a full tank of fuel.

(G.V.W.) Gross Vehicle Weight

The Gross Vehicle Weight is the maximum that a car is allowed to weigh when fully loaded. This must include any luggage, passengers, roof rack load and a full tank of fuel. If you are towing, then the weight of the tow bar ball load (see following page) must also be included. The maximum, allowable weight for your car is shown in the chart below. Only drivers with sufficient experience in towing large caravans/trailers should use their cars to tow these maximum loads.

Maximum rear axle load

Remember to take the tow bar ball load into account when determining the rear axle load.
The maximum allowable rear axle load for your car is shown in the following chart.

WEIGHT kg	GL						CD		
	SEDAN		HATCH		WAGON		Sedan		Hatch
	manual	auto	manual	auto	manual	auto	manual	auto	auto
Kerb	1308	1334	1307	1337	1343	1369	1351	1377	1416
G.V.W.	1782	1803	1830	1860	1822	1843	1776	1797	1920
Max. rear axle	945	945	945	945	945	945	945	945	945

Roof rack loads

For safety reasons do not exceed the maximum allowable load of 100 kg. The load should be distributed evenly and secured tightly with straps so that it cannot slip.

Roof rack loads alter the handling of a car, due to a change in the centre of gravity. When carrying loads on the roof rack avoid abrupt swerving or sharp steering. The load should be evenly distributed and you should not drive faster than 120 km/h. The weight on the roof rack must be included when working out the maximum car load (G.V.W.) - the roof rack load should be treated as luggage.

TOWING

Your car is designed primarily as a passenger car, so handling, durability and economy may be affected by towing a caravan or trailer. Before attempting any towing, ensure that the correct equipment is fitted.

The towing capacity when trailer brakes are fitted: 1,300 kg (2.5 litre engine)
1100 kg (2.0 and 2.2 litre engine)

The towing capacity when trailer brakes are *not* fitted: 500 kg

In higher elevations and/or mountainous terrain the maximum towing and loading limits should be reduced.

Note: Holden towing equipment is recommended where it is available. Where it is not available, no recommendation is made as to the make of equipment which should be used. Holden will not accept liability for defects occurring in towing equipment not marketed by Holden or for defects in the car arising from the use of such equipment. The use of such equipment may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended equipment affects the specifications or quality of your Holden vehicle.

Tow bar ball load

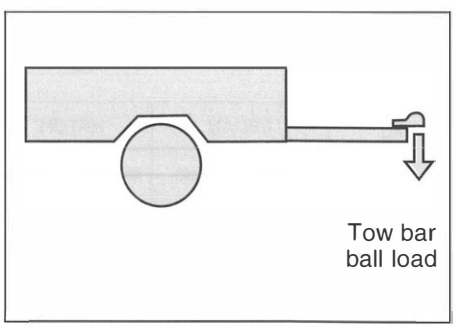
The "tow bar ball load" is the static weight on the tow bar.

Ideally, the ball load should be 10% of the packed trailer/caravan weight. This can be adjusted by correctly packing the contents of the trailer/caravan, i.e. by moving items forwards or backwards within the trailer/caravan so as to change the balance of the trailer/caravan.

If the ball load is too light or too heavy, the steering and handling of the car will be affected.

The load on the tow bar ball should be included as luggage weight, when working out the load your car is carrying. If the car was fully loaded before hitching the trailer/caravan some luggage may need to be stowed in the caravan, rather than in the car.

When measuring the tow bar ball load, make sure that the drawbar of the loaded trailer/caravan is at the same height as it will be when the trailer/caravan is mounted on the car. This is particularly important for trailer/caravans with tandem axles.

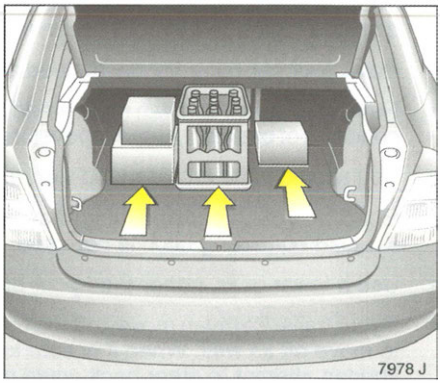


SAFE TOWING TIPS

- Your car will handle differently when towing. It's a good idea to make a couple of short distance trips with the trailer/caravan before you set off on the big one.
- Have your car correctly maintained and serviced.
- Have your trailer/caravan maintained and serviced, with particular attention given to condition of brakes, tyres, suspension, wheel bearings, towing coupling and lighting.
- You should have an extended-arm mirror on both sides of your car.
- Headlights may need re-aiming after the loaded caravan has been hitched, particularly if a load equalizing hitch is not used.
- Use a lower gear, rather than your brakes when descending steep hills.
- If your trailer/caravan moves off the road behind you, allow the left wheels of your car to move off as well. When it is safe to do so, carefully steer back on to the road. A sudden attempt to steer back could make you swerve dangerously.
- When towing you should not exceed 80 km/h if possible.
- When towing, your tyres should be inflated to the maximum recommended pressure shown on the tyre placard.
- Loads should be secured so that they cannot slip and should be placed in the centre of the trailer/caravan if possible, i.e. above the axle.
- Trailer brakes are required on trailer/caravans weighing over 500 kg when loaded. Some States require trailer brakes on loads less than 500 kg.
- The brakes on the trailer/caravan must be designed to cope with the braking requirements of that trailer/caravan under all towing conditions, without adversely affecting the brakes on the car.
- Make sure that you have enough room when cornering and avoid sudden manoeuvres.
- In the case of trailer/caravans with low directional stability, it is advisable to use a stabiliser to damp rolling motions.
- The cooling fan is driven electrically and so is not dependant on engine speed. At high engine speeds a lot of heat is produced and at low engine speeds correspondingly less heat is produced. For this reason, when driving uphill, do not shift down into a lower gear (which will increase engine speed) whenever the car can still climb the hill in the higher gear.
- Whenever a towbar is removed, be certain to have any mounting holes in the underbody properly sealed to prevent the possible entry of exhaust fumes, dust and water.
- Ensure that the tow bar does not obscure the rear licence plate. If necessary, remove the towbar tongue when it is not required for towing.
- If starting off on hills with a manual transmission, the most favourable engine speed is between 2,000 and 3,000 r.p.m. If an automatic transmission is fitted it is sufficient to fully depress the accelerator.

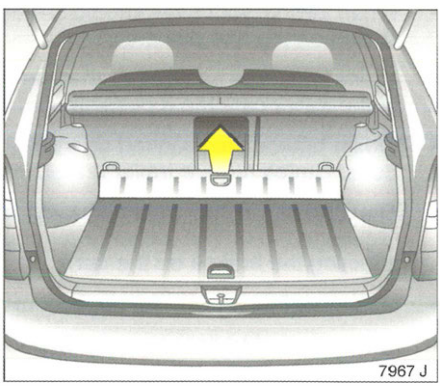
Heavy objects in the load compartment should be placed as far forward as possible against the rear seat backrests, or if the rear seat backrests are folded down, against the front seat backrests. If objects are to be stacked, the heavier objects should be placed at the bottom. Unsecured objects in the luggage/load compartment would be thrown forward with great force during heavy breaking or in an accident.

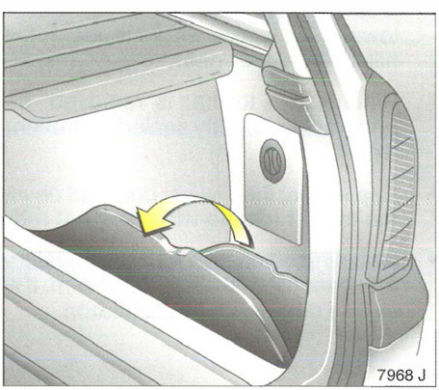
Also refer Chapter 3 for folding instruction of the rear seats.



Wagon stowage compartments

Stowage compartments are provided behind the rear seat backrests and in the side of the floor.





CHAPTER 11

Cleaning

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INTERIOR CLEANING

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11-2 Vinyl (P.V.C.) fabrics
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11-3 Seat belts
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EXTERIOR CLEANING

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11-5 Grease, oil & tar spots
11-5 Polishing
11-5 Paint inspection
11-5 Wheels
11-6 Exterior glass
11-7 Holden cleaning products

INTERIOR CLEANING

CAUTION:

Many cleaners may be toxic, flammable or may damage the interior. When cleaning the interior, avoid volatile cleaners such as: acetone, lacquer thinners, enamel reducers, nail polish removers, or cleaners such as laundry soaps, bleaches or reducing agents. Never use carbon tetrachloride, gasoline or naphtha for any cleaning purpose. Be sure the car is well ventilated while using any cleaners and always follow the cleaning manufacturer's recommendations.

Care and cleaning of upholstery

Dust and dirt which accumulate on upholstery should be removed every few weeks - more often with constant driving. This can be done readily with a vacuum cleaner. Before attempting to remove spots and stains, it is necessary to determine as accurately as possible:

- The type of fabric.
- The nature and age of the stain.
- The effect of the stain removal agent upon the colour, structure and general appearance of the upholstery.

It is essential that stains be removed as soon as possible after they have been made. If they are allowed to remain on the fabric for any length of time they very often become oxidised or set, and removal becomes difficult, if not impossible.

Cleaning P.V.C. coated fabrics

Vinyl (P.V.C.) coated fabrics are used for seating and auxiliary trimming. The grades used vary according to their function. P.V.C. fabrics are generally made by coating fabric with synthetic resins. Care of P.V.C. fabrics is a relatively simple but important matter. The surface should be wiped over with a dry cloth during the regular cleaning of the car.

Should dirt accumulate and become embedded in the material pattern, the following procedure is recommended.

1. Using lukewarm water and soap, or Holden Velour Fabric and Vinyl Cleaner, work up thick suds on a piece of cheesecloth, and apply to the surface. A soft bristle brush can be used to remove stubborn stains or dirt embedded in the grain of the material.
2. Repeat using only a damp cloth and no soap.
3. Wipe dry with a soft cloth. The above cleaning instructions also apply to the rubber floor mats.

INTERIOR CLEANING

Cleaning cloth trim

Where the seats in your car are upholstered with cloth, the following instructions should be observed.

- Most loose dirt and dust can be removed by a vacuum cleaner or soft brush.
- DO NOT use a whisk broom or a coarse hair brush.
- If normal soiling should take place it is recommended that the fabric be cleaned with Holden Velour Fabric and Vinyl Cleaner may be used.

Cleaning carpet

Thoroughly brush or vacuum the carpet. In many instances the carpet may require no further cleaning. If the carpet is extremely soiled, thoroughly vacuum it to remove loose dirt then, using Holden Velour Fabric and Vinyl Cleaner, clean approximately one square foot at a time. After each area is cleaned, remove as much of the cleaner as possible with a vacuum cleaner.

Cleaning seat belts

Cleaning of seat belts can be carried out by using a mild non-abrasive soap and lukewarm water. After washing be sure to thoroughly sponge the washing solution out of the belts.

CAUTION:

Do not bleach or dye seat belts since this may severely weaken them.

Cleaning interior glass

The interior glass area of the car should be cleaned using Holden Glass Cleaner with a clean soft cloth. Care must be taken when cleaning inside the rear window so as not to damage the demister.

Never use abrasive cleaners on any car glass, as they may cause scratches.

WASHING

CAUTION:

Care should be taken when moving the car after washing, in case water has affected the brakes. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with a clear area ahead, until brake performance returns to normal.

Underbody cleaning

Your car has a factory-applied PVC undercoating in the wheel arches (including longitudinal members) which provides permanent protection and needs no special maintenance. The surfaces of the car underside not covered by PVC are provided with a durable protective wax coating. Once a year, preferably before the start of the cold season the wax coating and PVC coating should be checked and if necessary, restored to perfect condition. Commercial bitumen and rubber materials can damage PVC coating. Have all work on the underbody performed by a Holden Dealer, as it requires knowledge of the specified materials and experience concerning their application.

The underbody should be washed following the end of the cold weather season to remove any dirt adhering to the underbody, since this may also contain salt.

Washing paint

Washing not only removes dirt and road grime that settles on the car, but also dilutes acids which accompany such grime, in particular, salt from air or sea spray encountered in coastal areas which often become trapped in crevices. Tree sap, road tar, excretion from birds, insects and industrial fall out often contain harmful chemicals and other foreign matter that may permanently damage the paint finish of the car. These should be removed without delay, using an effective removal agent.

Regular washing

If the car is in continuous use, it should be washed at least once a week with either cold or warm water (preferably running water), using clean chamois leathers, sponges or rags free from dirt or grit likely to scratch the paint finish. It is good practice to first hose the car to remove as much of the grit and grime as possible before swabbing the surface.

Do not wash the car under bright sunlight on hot days, as this will result in a streaky or spotted paint finish. This is caused by refraction of sunlight through the water drops (just like a magnifying glass) which concentrates the sunlight, producing very high temperatures on the paint surface. For the same reason, you should thoroughly dry the car after washing.

Holden Foaming Car Wash or Wash On Shine loosens road grime to make washing easier and leaves paint shining clean, refer last page of this chapter.

Do not use hot water, strong soap or chemical detergents. Any cleaner should be flushed promptly from the surface and not allowed to dry on the finish.

Hand washing of the car is recommended. However, if an automatic car wash is used then the roof antenna should be removed before driving through.

EXTERIOR CLEANING

Removing grease, oil and tar spots

Grease and oil, and even tar if it's fresh, can be removed from the finish with a little kerosene or turpentine. As a precaution against staining, wash and polish as soon as possible the area from which the foreign matter has been removed.

WARNINGS:

- **Some chemical cleaners used for removing road oils and tars from painted surfaces have been found to be detrimental to paint finishes.**
- **If petrol is spilt on the paint when refilling, flush off immediately with clean water, as petrol has a tendency to stain or soften new paint finish during the weathering out period, particularly when the car is exposed to high temperatures.**
- **Petrol MUST NOT be used to clean any painted or plastic surfaces.**

Insect spots

Insect spots on the paint finished parts of the car can be easily washed off by using a solution containing 1 litre of water in which approximately 110 grams of baking soda (Bicarbonate of Soda) has been dissolved. Flush the washed parts with clean water.

Polishing and waxing

Wax your car regularly and in particular after it has been washed using shampoo, otherwise the paintwork will dry out. The car must be re-waxed before water no longer forms beads on the paint. Waxing prevents harmful chemical action. Also wax edges and folds on opened doors and flaps as well the areas they cover.

Polishing is necessary only if the paint has become dull or if solid deposits have become attached to it. Plastic body parts should not be treated with wax or polish.

Paint inspection

Regular inspection of the car should be made for scratch marks, cracks or damaged areas, all of which could develop rust and thus affect paint finish. Any deep scratches, cracks or breakdown in the finish should be repaired without delay. Care should be taken to ensure that any rusting is counteracted immediately, otherwise rust "creep" will extend beyond the damaged area. This applies particularly in sub-tropical areas or coastal districts, where the moist, or salt-laden atmosphere accelerates rusting if it is allowed to develop through neglect. The paint finish of the car gives a very high degree of protection against the weather, but it should be realised that wear and deterioration occur when the car is exposed to elements for prolonged periods. The car therefore should be garaged whenever possible.

Wheels

Painted wheels can be treated with the same cleaner as for the body. For alloy wheels, alloy wheel cleaner is recommended.

EXTERIOR CLEANING

Tyres

Sponging with cold water is all that is necessary for normal cleaning of the tyres. Oil and grease can, and should be removed with soap and water or detergent. For tar or other substances, a mild abrasive, such as mechanic's hand soap or kitchen cleaning powder, may be used if necessary. Thoroughly wash the tyres with water to finish. Petrol must not be used for cleaning tyres.

New tyre look can be restored using Holden Tyre and Bumper Shine, refer last page of this chapter.

Glass cleaning - general

Special care should be taken to avoid scratching the glass when cleaning. If it is cleaned at the same time as the rest of the car, there is a possibility that particles of grit will cause fine scratches. Flush off any heavy mud deposits on the glass when washing the body, but leave the final cleaning and polishing until afterwards. Use Holden Glass Cleaner and wash each section of glass in turn, making sure that the water, its container and the sponge are quite clean and free from grit. Clean old linen cloth is better than new material for polishing glass.

Windscreen

It is important that the windscreen be kept clean so that the wiper blades may be as effective as possible in wiping the surface. Old wiper blades can cause windscreen scratching and therefore should be inspected regularly and replaced as necessary.

Abrasive materials must never be used to clean glass as they can cause scratches. A scratched windscreen will impair vision, particularly at night. After the windscreen has been cleaned with a wet sponge it should be wiped over with a soft lint free cloth or chamois.

It is recommended that Holden Optikleen be added to the windscreen washer reservoir to assist the wipers in keeping the windscreen clean whilst driving.

Wiper blades

Oil and road scum thrown up onto the windscreen will cause smearing when the wipers are switched on, as dirt then transfers onto the wiper blades. Many owners, whilst they methodically clean the windscreen glass, omit to clean the wiper blades and consequently smearing of the glass reappears immediately the wiper blades are set in motion. The blades can be cleaned by simply lifting them off the windscreen glass and cleaning with Holden Optikleen and a clean cloth.

DO NOT OPERATE THE WIPER BLADES BY HAND AS THIS MAY DAMAGE THE WIPER DRIVE MECHANISM.

If in dry conditions, the wiper blades are used to clean dust and dirt from the windscreen always use the washer system first to wet the windscreen. Ensure that the windscreen washer reservoir is not empty.

Engine bay

Important areas of the engine bay have been protected with a lacquer coating. Wash the engine only if absolutely necessary. Before washing the engine, protect the alternator and brake fluid container with plastic covers. After washing, parts of the engine, parts of the brake system located in the engine bay, axle components as well as body parts and cavities may need to protectively re-waxed.

HOLDEN CLEANING PRODUCTS

HOLDEN PART NUMBER	SIZE	DESCRIPTION	USAGE
92141386	500 ml	Polymer glaze polish	Seals in a deep, lustrous, glazed finish. Long life protection from oxidation, salt and weather damage.
92141387	500 ml	Easy gloss polish	Contains silicones and hard working waxes for extra shine.
92141388	500 ml	Wash on shine	Contains polymer protectants to shine. Adds a protective film to paintwork.
92141389	500 ml	Foaming car wash	Leaves a no-streak finish.
92141390	400 g	Velour fabric and vinyl cleaner	Cleans and deodorises velour, most fabric and vinyl upholstery, hood linings, mats and carpets.
92141391	350g	Tyre and bumper shine	Restores tyres and bumpers to as new finish.
92141182	350 g	Glass cleaner	Cleans all glass surfaces.
92141392		Chamois	
92140005	500 ml	Optikleen	Windscreen washer solvent.
92140004	5 ml	Optikleen sachet	Windscreen washer solvent - 1 sachet per washer bottle refill
92141393	125 g	Car freshener/deodorant	Removes tobacco smells and other odours.
92141394	300 g	Bug, tar and spot remover	Quickly dissolves and removes tar, grease, oil, bugs and other stubborn stains from your car's exterior.
92141395	750 ml	Wheel cleaner	Wheel cleaner, including alloy wheels
92141396	400 g	Degreaser	Removes oil and grease from engines.

CHAPTER 12

Servicing

Page

12-2 Service intervals
12-3 Extreme operating conditions
12-5 Maintenance schedule
12-7 Service coupons

SERVICE INTERVALS

When it comes to service, remember that your Holden Dealer has the trained personnel and specialised equipment to correctly service your vehicle. Your Dealer invites you to return for all your service needs both during and after the warranty period.

The safety, economy, emission control, performance and reliability of your vehicle cannot be assured unless regular maintenance is performed, preferably by factory-trained technicians at Holden Dealers.

Therefore, it is in the owner's interest that the following services are performed at the specified Distance or Months (whichever occurs first).

1,500 km - 1 month inspection
15,000 km - 1 year
30,000 km - 2 years
45,000 km - 3 years
60,000 km - 4 years
75,000 km - 5 years
90,000 km - 6 years
105,000 km - 7 years
120,000 km - 8 years
135,000 km - 9 years
150,000 km - 10 years
165,000 km - 11 years
180,000 km - 12 years

The one month (1,500 kilometres) inspection will be performed without cost for labour by the Selling Dealer.

This service may be carried out by another Holden Dealer provided you have a letter of Introduction from the Selling Dealer.

Your Dealer will supply the necessary letter of Introduction upon request.

The services shown in this schedule between 15,000 km and 180,000 km are to be performed after 180,000 km at the same intervals.

NOTE: All maintenance services as listed in this handbook and replacement of service items are the responsibility of the owner and as such are NOT considered, under the provisions of the new vehicle warranty to be rectification of defective material and workmanship. Items such as wheel alignment, necessary adjustments to drive belts, transmission, clutch, parking brake, etc. or any other items which may require servicing due to fair wear and tear will be carried out at the owner's cost.

Failure to have proper maintenance services carried out by an Authorised Holden Dealer or service Dealer may void your new Vehicle Warranty if the work is not carried out in accordance with Holden's specifications. It is strongly recommended that you read the "New Vehicle Warranty" in Chapter 9 so that you are aware of your entitlements.

Service coupons are provided further on in this chapter. When each service is performed the coupon is removed so that the following service coupon is readily visible to remind you when the next service is due.

After the service is completed, the owner should check that the service has been validated, by the Dealer stamping and signing the coupon stub. This is important as it will not only assist in the determination of Warranty Claims, but will enhance the value of the vehicle when selling.

EXTREME OPERATING CONDITIONS

If your vehicle operates under any of the extreme conditions listed in the table below it is recommended that some items be serviced more frequently than the intervals specified in the Maintenance Plan.

NOTE: The extra services shown in the table only need to be used if your vehicle operates continuously in that condition.

If you drive under any of these conditions on a one off basis e.g. holiday trip, then an extra service should be for that period only.

As a guide, if you operate continually for a period of one month or 1,000 km under any of the extreme conditions, then this could qualify for additional services.

If at any time it is considered that the above items or other items should be more frequently serviced due to the type of operation or before a long trip, discuss the situation with the service manager of your Holden Dealer.

Change automatic transmission fluid @ 60,000km or 4 years (whichever comes first)	**A**	**B**	**C**
Replace engine oil and filter @ 5,000km or 3 months (whichever comes first)	**A**		

A = Stop-start driving, excessive idling or low speed operation as experienced in inner city driving e.g. taxi, police, door to door delivery.

B = Caravan or trailer towing.

C = Extended heavy load high speed operation in temperatures above 35°C.

EXTREME OPERATING CONDITIONS

SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS Date ..... km ..... Items performed: .... Servicing Dealer	SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS Date ..... km ..... Items performed: .... Servicing Dealer .....
SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS Date ..... km ..... Items performed: .... Servicing Dealer	SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS Date ..... km ..... Items performed: .... Servicing Dealer .....
SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS Date ..... km ..... Items performed: .... Servicing Dealer	SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS Date ..... km ..... Items performed: .... Servicing Dealer .....

MAINTENANCE SCHEDULE

Use odometer reading or years, whichever occurs first	x 1,000 km	1.5	15	30	45	60	75	90	105	120	135	150	165	180
	or years	1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE ITEMS														
COOLANT - check level, check coolant %		1.5	1	2	3	4	5	6	7	8	9	10	11	12
COOLANT - fluid change		Fluid not changed for life of car												
DRIVE BELTS - check			1	2	3	4	5	6	7	8	9	10	11	12
ENGINE TOOTHED BELT - replace										8				
AIR CLEANER paper element - replace				2		4		6		8		10		12
SPARK PLUGS - replace						4				8				12
FUEL FILTER - replace				2		4		6		8		10		12
EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test - visual check of exhaust components - check idle speed, ignition timing and CO-contents - check efficiency of catalytic converter			1	2	3	4	5	6	7	8	9	10	11	12
ENGINE OIL AND FILTER - replace			1	2	3	4	5	6	7	8	9	10	11	12
POWER STEERING - check fluid level		1.5		2		4		6		8		10		12
AUTO TRANS - check fluid level. Readout of stored trouble codes				2		4		6		8		10		12
AUTO TRANS - fluid change		Fluid not changed for life of car, unless operating in extreme conditions												
LEAKAGE - visual check of engine and transmission		1.5	1	2	3	4	5	6	7	8	9	10	11	12
LIGHTS & SIGNAL DEVICES - check		1.5	1	2	3	4	5	6	7	8	9	10	11	12
WINDSCREEN WIPE/WASH system check fluid level and blade condition		1.5	1	2	3	4	5	6	7	8	9	10	11	12
CLUTCH PEDAL adjustment - check adjustment		1.5		2		4		6		8		10		12
DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES - lubricate				2		4		6		8		10		12

MAINTENANCE SCHEDULE cont.

Use odometer reading or years, whichever occurs first	x 1,000 km	1.5	15	30	45	60	75	90	105	120	135	150	165	180
	or years	1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE ITEMS														
HEADLIGHT ADJUSTMENT - check			1	2	3	4	5	6	7	8	9	10	11	12
BODY/UNDERBODY - check corrosion protection		1.5	1	2	3	4	5	6	7	8	9	10	11	12
FRONT AND REAR BRAKES - check pad thickness			1	2	3	4	5	6	7	8	9	10	11	12
BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check		1.5	1	2	3	4	5	6	7	8	9	10	11	12
RUBBER BOOTS - check		1.5		2		4		6		8		10		12
WHEELS - check wheel nut torque, tyre condition and tyre pressure		1.5	1	2	3	4	5	6	7	8	9	10	11	12
BATTERY - check level (if applicable) or replace acid container (if fitted)			1	2	3	4	5	6	7	8	9	10	11	12
BRAKE FLUID - change		change every 2 years (regardless of km)												
POLLEN FILTER - change				2		4		6		8		10		12
REMOTE CONTROL BATTERIES - replace				2		4		6		8		10		12
ROAD TEST		1.5	1	2	3	4	5	6	7	8	9	10	11	12
LABOUR TIMES														
If 2 or 2.2 litre engine fitted		-	1.4	2	1.4	2.1	1.4	2	1.4	3.1	1.4	2	1.4	2.1
If 2.5 litre engine fitted		-	1.5	2	1.5	2.9	1.5	2	1.5	4.6	1.5	2	1.5	2.9

- In addition to the above times, brake fluid will be changed every 2 years, regardless of kilometres, add 0.2 hours.
- The owner will be charged for all lubricants and materials used plus labour at the times recommended above.
- The repair or replacement of any part found faulty during a service check and not covered by Holden Warranty will be added to the charges.
- Where any deficiencies are noted, such items should be reported to the owner/ operator so that the extra work required can be authorised.
- The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives are not recommended; their use will not only increase operating costs, but may indeed be harmful to your vehicle.

1,500 km or 1 month Inspection Validation

This car has been thoroughly checked in accordance with the 1,500 km/one month inspection.

Dealer .....

Service Manager's signature .....

Date ..... Odometer reading .....

1,500km or 1 month INSPECTION

Holden invites the new owner of this car to return to the selling Dealer for a free service inspection at 1,500 km.

Owner's Name

Mr.
Mrs. .....
Miss.
Other.....

Address .....

Town & State ..... Postcode .....

Reg. no. ..... Engine no .....

I.S.O.V.I.N. ..... Model .....

Odometer reading ..... Date of Acquisition .....

Selling Dealer's Stamp & Signature .....

This car has been thoroughly checked in accordance with the items on the reverse side of this voucher.

This inspection is provided free of charge.

Servicing Dealer's Stamp & Signature

Servicing Dealer .....

Town ..... State .....

Owner's signature .....

- ❑ COOLANT - check fluid level, check coolant %
- ❑ ENGINE OIL - check fluid level
- ❑ POWER STEERING - check fluid level
- ❑ WASHER - check fluid level
- ❑ BRAKE FLUID - check fluid level
- ❑ LEAKAGE - visual check of engine and transmission
- ❑ LIGHTS AND SIGNALLING DEVICES - check
- ❑ CLUTCH PEDAL adjustment - check adjustment
- ❑ BODY/UNDERBODY - check corrosion protection
- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ RUBBER BOOTS - check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ ROAD TEST

15,000 km or 1 year Service Validation

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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15,000 km or 1 year

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.4 hours (if 2 or 2.2 litre engine fitted)
- 1.5 hours (if 2.5 litre engine fitted)

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....
.....
.....

Signature .....

Date .....

- ❑ COOLANT - check level, check coolant %
- ❑ DRIVE BELTS - check
- ❑ EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test - visual check of exhaust components - check idle speed, ignition timing, and CO contents - check efficiency of catalytic converter
- ❑ ENGINE OIL AND FILTER - replace
- ❑ LEAKAGE - visual check of engine and transmission
- ❑ LIGHTS AND SIGNALLING DEVICES - check
- ❑ WINDSCREEN WIPE/WASH system - check fluid level and blade condition
- ❑ HEADLIGHT ADJUSTMENT - check
- ❑ BODY/UNDERBODY - check corrosion protection
- ❑ FRONT AND REAR BRAKES - check pad thickness
- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ BATTERY - check level (if applicable) or replace acid container (if fitted)
- ❑ ROAD TEST

30,000 km or 2 year Service Validation

Servicing Dealer .....

Brake fluid changed: YES/NO

Date of Service .....

Odometer .....

Signed .....

Additional services performed: .....

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30,000 km or 2 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 2 hours
- add 0.2 hours if brake fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

.....

.....

Signature .....

Date .....

- ❑ COOLANT - check level, check coolant %
- ❑ POLLEN FILTER - replace
- ❑ DRIVE BELTS - check
- ❑ AIR CLEANER paper element - replace
- ❑ FUEL FILTER - replace
- ❑ EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test - visual check of exhaust components - check idle speed, ignition timing, and CO contents - check efficiency of catalytic converter
- ❑ ENGINE OIL AND FILTER - replace
- ❑ POWER STEERING - check fluid level
- ❑ AUTO TRANS - check fluid level. Read-out of stored trouble codes
- ❑ LEAKAGE - visual check of engine and transmission
- ❑ LIGHTS AND SIGNALLING DEVICES - check
- ❑ WINDSCREEN WIPE/WASH system - check fluid level and blade condition
- ❑ CLUTCH PEDAL adjustment - check adjustment
- ❑ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES - lubricate
- ❑ HEADLIGHT ADJUSTMENT - check
- ❑ BODY/UNDERBODY - check corrosion protection
- ❑ FRONT AND REAR BRAKES - check pad thickness
- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ RUBBER BOOTS - check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ BATTERY - check level (if applicable) or replace acid container (if fitted)
- ❑ REMOTE CONTROL BATTERIES - replace
- ❑ ROAD TEST

- ❑ BRAKE FLUID - change every 2 years (regardless of km)

45,000 km or 3 years Service Validation

Servicing Dealer .....

Brake fluid changed: YES/NO

Date of Service .....

Odometer .....

Signed .....

Additional services performed: .....

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45,000 km or 3 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.4 hours (if 2 or 2.2 litre engine fitted)
- 1.5 hours (if 2.5 litre engine fitted)
- add 0.2 hours if brake fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

.....

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Signature .....

Date .....

- ❑ COOLANT - check level, check coolant %
- ❑ DRIVE BELTS - check
- ❑ EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test - visual check of exhaust components - check idle speed, ignition timing, and CO contents - check efficiency of catalytic converter
- ❑ ENGINE OIL AND FILTER - replace
- ❑ LEAKAGE - visual check of engine and transmission
- ❑ LIGHTS AND SIGNALLING DEVICES - check
- ❑ WINDSCREEN WIPE/WASH system - check fluid level and blade condition
- ❑ HEADLIGHT ADJUSTMENT - check
- ❑ BODY/UNDERBODY - check corrosion protection
- ❑ FRONT AND REAR BRAKES - check pad thickness
- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ BATTERY - check level (if applicable) or replace acid container (if fitted)
- ❑ ROAD TEST

- ❑ BRAKE FLUID - change every 2 years (regardless of km)

60,000 km or 4 years Service Validation

Servicing Dealer .....

Brake fluid changed: YES/NO

Date of Service .....

Odometer .....

Signed .....

Additional services performed: .....

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60,000 km or 4 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 2.1 hours (if 2 or 2.2 litre engine fitted)
- 2.9 hours (if 2.5 litre engine fitted)
- add 0.2 hours if brake fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature .....

Date .....

- ❑ COOLANT - check level, check coolant %
- ❑ POLLEN FILTER - replace
- ❑ DRIVE BELTS - check
- ❑ AIR CLEANER paper element - replace
- ❑ SPARK PLUGS - replace
- ❑ FUEL FILTER - replace
- ❑ EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test - visual check of exhaust components - check idle speed, ignition timing, and CO contents - check efficiency of catalytic converter
- ❑ ENGINE OIL AND FILTER - replace
- ❑ POWER STEERING - check fluid level
- ❑ AUTO TRANS - check fluid level. Read-out of stored trouble codes
- ❑ LEAKAGE - visual check of engine and transmission
- ❑ LIGHTS AND SIGNALLING DEVICES - check
- ❑ WINDSCREEN WIPE/WASH system - check fluid level and blade condition
- ❑ CLUTCH PEDAL adjustment - check adjustment
- ❑ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES - lubricate
- ❑ HEADLIGHT ADJUSTMENT - check
- ❑ BODY/UNDERBODY - check corrosion protection
- ❑ FRONT AND REAR BRAKES - check pad thickness
- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ RUBBER BOOTS - check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ BATTERY - check level (if applicable) or replace acid container (if fitted)
- ❑ REMOTE CONTROL BATTERIES - replace
- ❑ ROAD TEST

- ❑ BRAKE FLUID - change every 2 years (regardless of km)

75,000 km or 5 years Service Validation

Servicing Dealer .....

Brake fluid changed: YES/NO

Date of Service .....

Odometer .....

Signed .....

Additional services performed: .....

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75,000 km or 5 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.4 hours (if 2 or 2.2 litre engine fitted)
- 1.5 hours (if 2.5 litre engine fitted)
- add 0.2 hours if brake fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature .....

Date .....

- ❑ COOLANT - check level, check coolant %
- ❑ DRIVE BELTS - check
- ❑ EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test - visual check of exhaust components - check idle speed, ignition timing, and CO contents - check efficiency of catalytic converter
- ❑ ENGINE OIL AND FILTER - replace
- ❑ LEAKAGE - visual check of engine and transmission
- ❑ LIGHTS AND SIGNALLING DEVICES - check
- ❑ WINDSCREEN WIPE/WASH system - check fluid level and blade condition
- ❑ HEADLIGHT ADJUSTMENT - check
- ❑ BODY/UNDERBODY - check corrosion protection
- ❑ FRONT AND REAR BRAKES - check pad thickness
- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ BATTERY - check level (if applicable) or replace acid container (if fitted)
- ❑ ROAD TEST

- ❑ BRAKE FLUID - change every 2 years (regardless of km)

90,000 km or 6 years Service Validation

Servicing Dealer .....
Brake fluid changed: YES/NO
Date of Service .....
Odometer .....
Signed .....

Additional services performed: .....
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90,000 km or 6 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 2 hours
- add 0.2 hours if brake fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature .....

Date .....

- ❑ COOLANT - check level, check coolant %
- ❑ POLLEN FILTER - replace
- ❑ DRIVE BELTS - check
- ❑ AIR CLEANER paper element - replace
- ❑ FUEL FILTER - replace
- ❑ EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test - visual check of exhaust components - check idle speed, ignition timing, and CO contents - check efficiency of catalytic converter
- ❑ ENGINE OIL AND FILTER - replace
- ❑ POWER STEERING - check fluid level
- ❑ AUTO TRANS - check fluid level. Read-out of stored trouble codes
- ❑ LEAKAGE - visual check of engine and transmission
- ❑ LIGHTS AND SIGNALLING DEVICES - check
- ❑ WINDSCREEN WIPE/WASH system - check fluid level and blade condition
- ❑ CLUTCH PEDAL adjustment - check adjustment
- ❑ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES - lubricate
- ❑ HEADLIGHT ADJUSTMENT - check
- ❑ BODY/UNDERBODY - check corrosion protection
- ❑ FRONT AND REAR BRAKES - check pad thickness
- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ RUBBER BOOTS - check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ BATTERY - check level (if applicable) or replace acid container (if fitted)
- ❑ REMOTE CONTROL BATTERIES - replace
- ❑ ROAD TEST

- ❑ BRAKE FLUID - change every 2 years (regardless of km)

105,000 km or 7 years Service Validation

Servicing Dealer .....

Brake fluid changed: YES/NO

Date of Service .....

Odometer .....

Signed .....

Additional services performed: .....

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105,000 km or 7 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.4 hours (if 2 or 2.2 litre engine fitted)
- 1.5 hours (if 2.5 litre engine fitted)
- add 0.2 hours if brake fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

.....

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.....

Signature .....

Date .....

- ❑ COOLANT - check level, check coolant %
- ❑ DRIVE BELTS - check
- ❑ EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test - visual check of exhaust components - check idle speed, ignition timing, and CO contents - check efficiency of catalytic converter
- ❑ ENGINE OIL AND FILTER - replace
- ❑ LEAKAGE - visual check of engine and transmission
- ❑ LIGHTS AND SIGNALLING DEVICES - check
- ❑ WINDSCREEN WIPE/WASH system - check fluid level and blade condition
- ❑ HEADLIGHT ADJUSTMENT - check
- ❑ BODY/UNDERBODY - check corrosion protection
- ❑ FRONT AND REAR BRAKES - check pad thickness
- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ BATTERY - check level (if applicable) or replace acid container (if fitted)
- ❑ ROAD TEST

- ❑ BRAKE FLUID - change every 2 years (regardless of km)

120,000 km or 8 years Service Validation

Servicing Dealer .....

Brake fluid changed: YES/NO

Date of Service .....

Odometer .....

Signed .....

Additional services performed: .....

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120,000 km or 8 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 3.1 hours (if 2 or 2.2 litre engine fitted)
- 4.6 hours (if 2.5 litre engine fitted)
- add 0.2 hours if brake fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature .....

Date .....

- ❑ COOLANT - check level, check coolant %
- ❑ POLLEN FILTER - replace
- ❑ DRIVE BELTS - check
- ❑ ENGINE TOOTHED BELT - replace
- ❑ AIR CLEANER paper element - replace
- ❑ SPARK PLUGS - replace
- ❑ FUEL FILTER - replace
- ❑ EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test - visual check of exhaust components - check idle speed, ignition timing, and CO contents - check efficiency of catalytic converter
- ❑ ENGINE OIL AND FILTER - replace
- ❑ POWER STEERING - check fluid level
- ❑ AUTO TRANS - check fluid level. Read-out of stored trouble codes
- ❑ LEAKAGE - visual check of engine and transmission
- ❑ LIGHTS AND SIGNALLING DEVICES - check
- ❑ WINDSCREEN WIPE/WASH system - check fluid level and blade condition
- ❑ CLUTCH PEDAL adjustment - check adjustment
- ❑ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES - lubricate
- ❑ HEADLIGHT ADJUSTMENT - check
- ❑ BODY/UNDERBODY - check corrosion protection
- ❑ FRONT AND REAR BRAKES - check pad thickness
- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ RUBBER BOOTS - check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ BATTERY - check level (if applicable) or replace acid container (if fitted)
- ❑ REMOTE CONTROL BATTERIES - replace
- ❑ ROAD TEST

- ❑ BRAKE FLUID - change every 2 years (regardless of km)

135,000 km or 9 years Service Validation

Servicing Dealer .....

Brake fluid changed: YES/NO

Date of Service .....

Odometer .....

Signed .....

Additional services performed: .....

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135,000 km or 9 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.4 hours (if 2 or 2.2 litre engine fitted)
- 1.5 hours (if 2.5 litre engine fitted)
- add 0.2 hours if brake fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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.....

.....

Signature .....

Date .....

- ❑ COOLANT - check level, check coolant %
- ❑ DRIVE BELTS - check
- ❑ EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test - visual check of exhaust components - check idle speed, ignition timing, and CO contents - check efficiency of catalytic converter
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- ❑ BODY/UNDERBODY - check corrosion protection
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- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ BATTERY - check level (if applicable) or replace acid container (if fitted)
- ❑ ROAD TEST

- ❑ BRAKE FLUID - change every 2 years (regardless of km)

150,000 km or 10 years Service Validation

Servicing Dealer .....

Brake fluid changed: YES/NO

Date of Service .....

Odometer .....

Signed .....

Additional services performed: .....

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150,000 km or 10 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 2 hours
- add 0.2 hours if brake fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature .....

Date .....

- ❑ COOLANT - check level, check coolant %
- ❑ POLLEN FILTER - replace
- ❑ DRIVE BELTS - check
- ❑ AIR CLEANER paper element - replace
- ❑ FUEL FILTER - replace
- ❑ EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test - visual check of exhaust components - check idle speed, ignition timing, and CO contents - check efficiency of catalytic converter
- ❑ ENGINE OIL AND FILTER - replace
- ❑ POWER STEERING - check fluid level
- ❑ AUTO TRANS - check fluid level. Read-out of stored trouble codes
- ❑ LEAKAGE - visual check of engine and transmission
- ❑ LIGHTS AND SIGNALLING DEVICES - check
- ❑ WINDSCREEN WIPE/WASH system - check fluid level and blade condition
- ❑ CLUTCH PEDAL adjustment - check adjustment
- ❑ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES - lubricate
- ❑ HEADLIGHT ADJUSTMENT - check
- ❑ BODY/UNDERBODY - check corrosion protection
- ❑ FRONT AND REAR BRAKES - check pad thickness
- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ RUBBER BOOTS - check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ BATTERY - check level (if applicable) or replace acid container (if fitted)
- ❑ REMOTE CONTROL BATTERIES - replace
- ❑ ROAD TEST

- ❑ BRAKE FLUID - change every 2 years (regardless of km)

165,000 km or 11 years Service Validation

Servicing Dealer .....

Brake fluid changed: YES/NO

Date of Service .....

Odometer .....

Signed .....

Additional services performed: .....

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165,000 km or 11 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.4 hours (if 2 or 2.2 litre engine fitted)
- 1.5 hours (if 2.5 litre engine fitted)
- add 0.2 hours if brake fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature .....

Date .....

- ❑ COOLANT - check level, check coolant %
- ❑ DRIVE BELTS - check
- ❑ EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test -, visual check of exhaust components - check idle speed, ignition timing, and CO contents - check efficiency of catalytic converter
- ❑ ENGINE OIL AND FILTER - replace
- ❑ LEAKAGE - visual check of engine and transmission
- ❑ LIGHTS AND SIGNALLING DEVICES - check
- ❑ WINDSCREEN WIPE/WASH system - check fluid level and blade condition
- ❑ HEADLIGHT ADJUSTMENT - check
- ❑ BODY/UNDERBODY - check corrosion protection
- ❑ FRONT AND REAR BRAKES - check pad thickness
- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ BATTERY - check level (if applicable) or replace acid container (if fitted)
- ❑ ROAD TEST

- ❑ BRAKE FLUID - Change every 2 years (regardless of km)

180,000 km or 12 years Service Validation

Servicing Dealer .....

Brake fluid changed: YES/NO

Date of Service .....

Odometer .....

Signed .....

Additional services performed: .....

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180,000 km or 12 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 2.1 hours (if 2 or 2.2 litre engine fitted)
- 2.9 hours (if 2.5 litre engine fitted)
- add 0.2 hours if brake fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

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Signature .....

Date .....

- ❑ COOLANT - check level, check coolant %
- ❑ POLLEN FILTER - replace
- ❑ DRIVE BELTS - check
- ❑ AIR CLEANER paper element - replace
- ❑ SPARK PLUGS - replace
- ❑ FUEL FILTER - replace
- ❑ EXHAUST EMISSION - check readout of stored trouble codes - carry out circuit test - visual check of exhaust components - check idle speed, ignition timing, and CO contents - check efficiency of catalytic converter
- ❑ ENGINE OIL AND FILTER - replace
- ❑ POWER STEERING - check fluid level
- ❑ AUTO TRANS - check fluid level. Read-out of stored trouble codes
- ❑ LEAKAGE - visual check of engine and transmission
- ❑ LIGHTS AND SIGNALLING DEVICES - check
- ❑ WINDSCREEN WIPE/WASH system - check fluid level and blade condition
- ❑ CLUTCH PEDAL adjustment - check adjustment
- ❑ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES - lubricate
- ❑ HEADLIGHT ADJUSTMENT - check
- ❑ BODY/UNDERBODY - check corrosion protection
- ❑ FRONT AND REAR BRAKES - check pad thickness
- ❑ BRAKE PIPES, BRAKE PRESSURE HOSES AND FUEL LINES - visual check
- ❑ RUBBER BOOTS - check
- ❑ WHEELS - check wheel nut torque, tyre condition and tyre pressure
- ❑ BATTERY - check level (if applicable) or replace acid container (if fitted)
- ❑ REMOTE CONTROL BATTERIES - replace
- ❑ ROAD TEST

- ❑ BRAKE FLUID - change every 2 years (regardless of km)

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